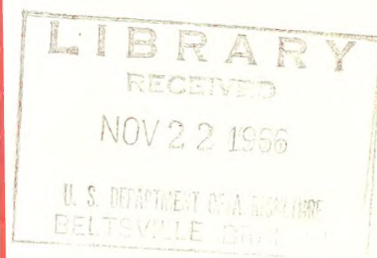
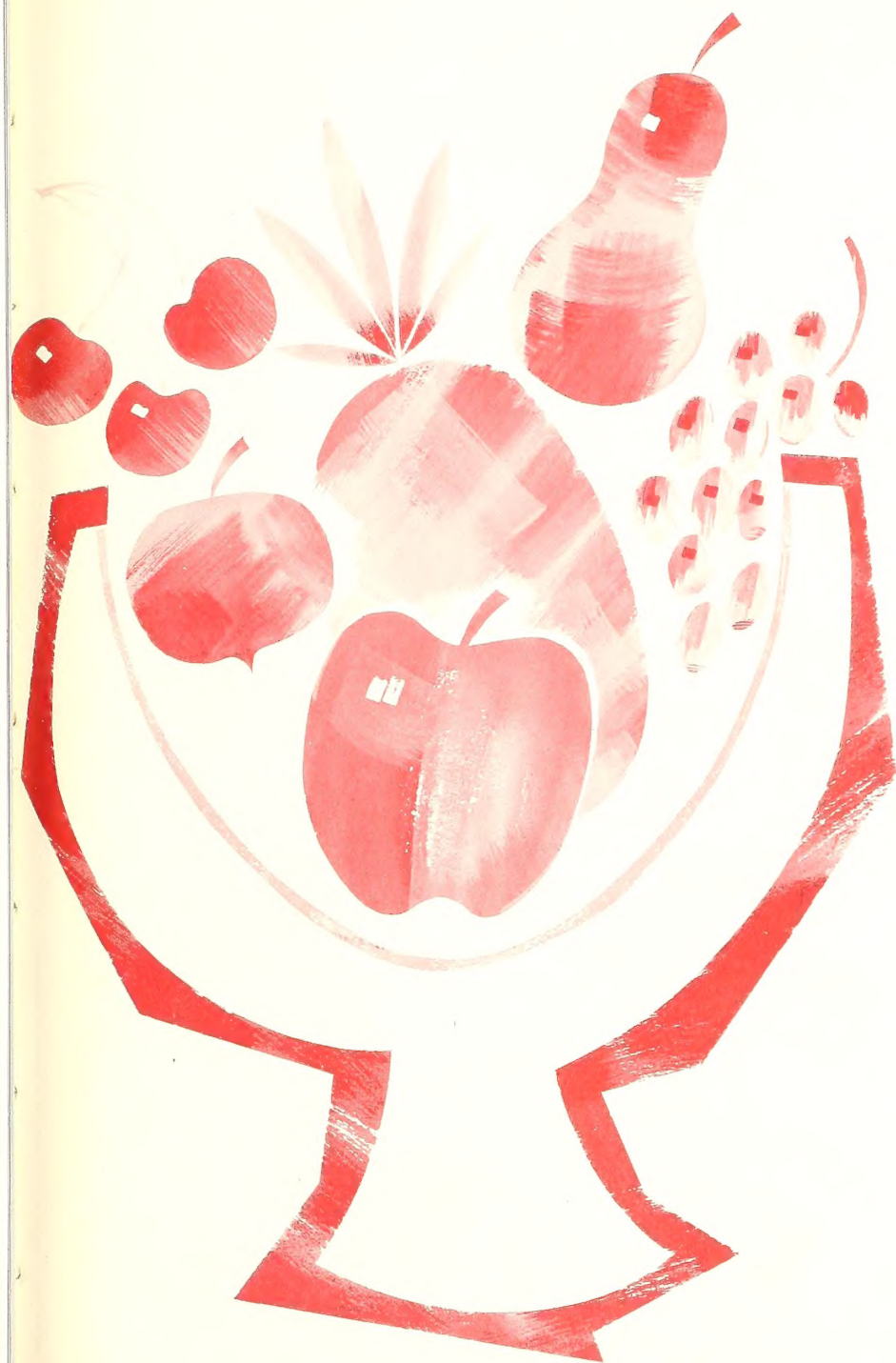


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Homemakers' Use of and Opinions About Selected Fruits and Fruit Products



HIGHLIGHTS

Nearly every household in the United States had purchased some fresh fruit in the past 12 months, according to the testimony of homemakers interviewed in a nationwide survey. A variety of fruits was used in the majority of these homes--better than half of the homemakers indicated that in the preceding year they had purchased 7 of the 11 fresh fruits covered in the questionnaire.

Nonpurchasers of the specific fresh fruits gave a variety of reasons for not buying these fruits. However, many of the reasons given did not indicate an actual dislike of the fruit itself. For example, nonpurchasers of apples, grapes, peaches, pears, and plums or fresh prunes cited "have own trees, friends and relative supply them" as reasons for not buying them. However, a large proportion of nonpurchasers of nectarines stated that they were "unfamiliar with the fruit." Apricots and cherries were not purchased because homemakers were "unable to obtain the fruit," while nearly half of those who had not purchased pineapple said that they had not done so because "it was difficult to prepare." Many pineapple users also mentioned this disadvantage.

Most homemakers (75 percent) generally like to buy unpackaged or loose fresh fruit, although 10 percent of this group said that there were some specific fruits they prefer packaged. "You get no spoiled or bruised fruit," "you can get the number you want," and "you can choose the one you want" were the main reasons given for preferring to buy fruit loose.

Homemakers were asked to select from a list of both positive and negative statements those they felt were especially true about six specific fresh fruits--apples, pears, bananas, grapes, peaches, and plums or fresh prunes. While homemakers generally selected the same positive statements for all the fruits, the frequency with which they were mentioned varied according to each fruit's special appeal to the consumer. "Good for health," and "good for snacks or packed lunches," were selected most often for most of the fruits. However, more than a third as many selected these reasons for apples (91 and 93 percent) as did for plums or fresh prunes (66 and 51 percent). "Can be used in many ways" was selected by more than twice as many homemakers for apples (86 percent) as for plums or fresh prunes (20 percent). Negative statements, on the other hand, were generally selected less frequently but with proportionately wider variation in frequency. "Messy to eat" was cited by better than 4 in 10 (43 percent) of the homemakers for peaches, while only 1 percent mentioned it for apples.

When they last purchased fruit, roughly half of the homemakers had a specific fruit in mind before they went to the store. Better than a fourth had planned to buy some fruit but decided on the specific fruit in the store; almost one-sixth did not have fruit in mind at all but decided to purchase some while in the store.

When asked what they thought could be done by the store manager to increase the purchase of fresh fruits, homemakers felt "high-quality fruit" and "attractive displays" would be the most important influences.

FRESH APPLES

The use of fresh apples in the home is almost universal, with better than 9 in 10 homemakers indicating they had purchased them in the last year. Fresh apples were purchased most often in the supermarkets (as defined by the respondent), followed by the grocery stores; however, the majority of homemakers said they bought them at more than one outlet.

PREFACE

This report presents information on American homemakers' use of and attitudes toward selected fresh and processed fruits.

The study reported was conducted by the Special Surveys Branch, Standards and Research Division, Statistical Reporting Service. It is part of a broad program which will help agricultural industries strengthen their market position and give consumers an opportunity to evaluate the products available to them.

The study was conducted under the general direction of Trienah Meyers and Margaret Weidenhamer, and was planned by Elizabeth Watters. Subject-matter specialists in the U.S. Department of Agriculture and industry advisors gave technical advice during the development of the study. Industry advisors were the United Fresh Fruit and Vegetable Association; National Peach Council; International Apple Association; National Apple Institute; and the California Grape and Tree Fruit League.

Crossley, S-D Surveys, Inc., New York City, under contract with the U.S. Department of Agriculture, designed the sample, developed the questionnaire, conducted the survey, and prepared a draft of the report.

A preliminary release (SRS-6--Homemakers' Use of and Opinions About Selected Fruits and Fruit Products) was published in May 1965.

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Nearly all homemakers who used fresh apples said they were eaten "out of hand," with better than half also using apples in salads. They were eaten either as daytime or evening snacks in 77 percent of the households; 39 percent of the homemakers reported that apples were carried in a "packed lunch" by family members.

When looking for fresh apples for eating raw, most homemakers wanted apples that were red, juicy, unblemished, not bruised, of medium size, firm but not hard, sweet, and of the Delicious variety.

Better than 8 homemakers in 10 said they had used fresh apples for cooking or baking in the preceding year. Those who had not used them gave as their reasons "prefer raw apples," "no time to bake," or "it is not worth the effort." Apple pies, baked apples, and applesauce were cited most often as uses of apples in cooking or baking.

About 6 in 10 of the respondents who reported using fresh apples for cooking or baking said that they used less than half of all the apples they purchased in this manner. The level of apple purchases seemingly was not related to the proportion used for cooking or baking. About 60 percent of the high and low purchasers of apples used less than half of the fresh apples they purchased in cooking or baking.

When choosing fresh apples for cooking or baking the homemaker wanted apples that were juicy, firm but not hard, tart, of medium size, and without blemishes or bruises. Color, while important, was not as important in a cooking apple as in one that was to be eaten raw. Preference for a certain variety of cooking apple seemed to vary by region, with no one variety an overall favorite.

Homemakers who mentioned that they had difficulty in finding good fresh apples were in the minority (14 percent). Most of those who did so, said they were difficult to find in the spring and summer. About twice as many homemakers (28 percent), however, had been disappointed in apples they had purchased in the past year. They were disappointed mainly with the texture or taste of the apples.

APPLESAUCE

Most of the homemakers said they had used applesauce in some form in the past year--36 percent had used both processed and homemade; almost the same proportion reported the use of processed only, while 14 percent had used homemade applesauce only. When the users of processed applesauce were asked which they preferred, nearly half indicated that they preferred the homemade variety mainly because of taste--either it "could be flavored to one's own taste," "had a better taste" generally, or "had a fresh taste." Those who said they preferred the processed (about a third) cited its convenience.

According to the majority of all the homemakers interviewed, "good applesauce" should be yellow, sweet tasting, smooth, and of medium thickness.

PROCESSED FRUIT

Homemakers were questioned about their use of nine canned fruits (pineapple, peaches, pears, apricots, sweet cherries, apples, plums or prunes, sour cherries, fruit cocktail or salad) in the last year. Between 32 and 86 percent indicated the use of each of these nine canned products. Only 3 percent said they had not purchased any of these canned products during that time.

Except for pineapple, the incidence of purchase of each of these fruits was higher among homemakers who had bought the same fresh fruit in the past year.

When asked which of four fruit juices (grape, pineapple, prune, and apple) they had purchased, from 38 to 63 percent of the homemakers reported using these juices in the past year. Only 13 percent indicated they had not purchased any of them.

PRUNES

A large proportion of the respondents indicated that they had used prunes in some form (canned, dried or prune juice) in the last year. Dried prunes had been used by 59 percent of the homemakers, about half of whom had served them at least once a month.

A variety of reasons were given for the use of prunes. They were used mainly as a laxative or because they were healthy or nutritious.

RAISINS

The proportion of homemakers who used raisins in the home had not changed since 1957. In both surveys, 83 percent of the American homemakers reported using raisins; however, they were used less frequently by homemakers in the current survey.

HOMEMAKERS' USE OF AND OPINIONS ABOUT SELECTED FRUITS AND FRUIT PRODUCTS

By

L. Yvonne Clayton, Study Director
Standards and Research Division
Statistical Reporting Service

INTRODUCTION

Per capita consumption of fresh noncitrus fruits has declined in the past 20 years, but consumption of processed noncitrus fruit during this same period increased considerably. To understand the noncitrus market better, the industry needs up-to-date information on how each product appeals to the consumer and what aspects the consumer reacts to negatively.

To provide these data, the U.S. Department of Agriculture conducted a nationwide survey of consumers' attitudes. Such information is an important aid in maintaining or increasing markets for, and consumers' satisfaction with, agricultural products.

Data were obtained in personal interviews with a national probability sample of homemakers, chosen as representative of households throughout the Nation. The homemaker is defined as the person with primary responsibility for purchasing and preparing food for the household. In most households this person is a woman, but men qualified as respondents in about 5 percent of the 2,454 sample households.

Interviewing was done from mid-November 1963 to mid-January 1964. Interviews required, on the average, about an hour.

Limitations of the Data

In interpreting the results of this study, as in all studies involving sampling, allowance must be made for error that might result from interviewing a sample and not the whole population. Sampling errors are discussed in the appendix. In general, figures based on the responses of all the homemakers interviewed may be assumed to be within 3 percentage points of the figures that would have been obtained from a census conducted under the same circumstances.

As in all studies, the figures are also subject to errors of response and of reporting. For example, some homemakers may have erred in reporting from memory on whether or not they had used certain products, the amount they had used, and the frequency with which they had used them during the past year.

It should be taken into consideration that when a homemaker says she uses a product two or three times a week she is describing what she considers to be her general practice. However, occasionally she may omit a week because the price is too high, because the item is not available, because the family is away, or for some other reason. Therefore, in any given week the proportion of homemakers using a product will undoubtedly be smaller than the proportion who say they use it once a week or more.

FRESH NONCITRUS FRUIT

USE OF FRESH NONCITRUS FRUITS

Nearly every household in the United States used some fresh noncitrus fruit in the 12 months preceding the study. Homemakers were asked general questions on their purchase and use of 11 specific fresh fruits and more specific questions about some of them. Those respondents who had not purchased the specific fruits in the preceding 12 months were then questioned about their use of them in recent years. As shown below, better than half of the respondents said that they had purchased bananas, apples, oranges (included to permit comparison), grapes, peaches, pears, and plums or fresh prunes, and over a third reported the purchase of cherries and nectarines. Nonusers were questioned about their purchase of these fruits in recent years. From 10 to 17 percent of the homemakers said they had purchased cherries, nectarines, pineapple, and apricots in recent years.

Homemakers who had purchased fresh fruit:

<u>Fruit</u>	<u>In the past 12 months</u>	<u>Not in the past 12 months but in recent years¹</u>
	<u>Percent</u>	<u>Percent</u>
Bananas.	96	1
Apples.	94	1
Oranges.	90	4
Grapes	89	4
Peaches.	86	5
Pears	68	9
Plums or prunes.	66	8
Cherries (sweet).	48	14
Nectarines.	38	10
Pineapple.	29	17
Apricots	22	17

¹ Percentage for all homemakers.

Although the use of fresh noncitrus fruit in a 12-month period seemed to be universal, there were some slight variations in its use among different segments of the population. As might be expected, the incidence of purchase of all fruit was higher among the better educated homemakers and those in the upper income brackets. Grapes, oranges, and plums or fresh prunes were purchased by a slightly larger proportion of households with children. Cherries, pears, pineapple, plums or fresh prunes, apricots, and nectarines seemed to be more popular with families in the larger metropolitan areas. Apricots and nectarines were purchased by a large number of homemakers in the West, while cherries, pears, pineapple, and plums or fresh prunes found their greatest acceptance in the Northeast (appendix, table 1).

Only 39 homemakers said that in the preceding year they had not purchased at least one of the 11 fresh fruits included in the study. This number was too small for any detailed analysis.

Reasons for Nonpurchase of Specific Fresh Fruits

Nonpurchasers of the specific fresh fruits gave a variety of reasons for not having purchased them in the past 12 months. However, some of the reasons given by the homemakers were not a deterrent to their use of the specific fruits or an indication that the fruit itself was disliked. The principal reason given for not purchasing apples, grapes, peaches, pears, and plums or prunes was "have own trees or friends and relatives supply them." Nonpurchasers of apricots and nectarines reported that they were unable to obtain these fruits or were unfamiliar with them.

The small proportion of homemakers who had not purchased bananas and oranges said that they had not done so for reasons related to health--they thought these fruits were difficult to digest or that they were allergic to them.

Over half of the homemakers said that they had not purchased cherries or pineapple; they indicated that these fruits were too expensive or were difficult to prepare (table 2).

Homemakers' Opinions About Amounts of Selected Fresh Fruits They Had Purchased During the Past Five Years

Purchasers of apples, bananas, grapes, and peaches were asked if they thought they had bought more, less, or about the same amount in the past 12 months, compared with 5 years ago. Those who reported they were purchasing less were more than offset by those who indicated that they were purchasing more, as shown below:

	<u>Apples</u>	<u>Bananas</u>	<u>Grapes</u>	<u>Peaches</u>
	<u>-- Percent --</u>			
More in past year.	41	36	30	28
Less in past year.	14	10	12	16
About the same.	45	54	58	56
Number of cases.	2,307	2,351	2,179	2,104

For all four fruits, those respondents who reported having bought more during the past year included relatively higher proportions of:

- younger homemakers
- families with children
- upper income, better educated homemakers
- those living in metropolitan areas

More details can be found in table 3.

Reasons for Buying More or Less Fruit Nowadays

The major reasons given for buying more fruit now than 5 years ago were "the family is larger" (mentioned by more than 40 percent of the homemakers) and, "children are older--old enough to eat them" (cited by over 30 percent). (table 4)

The main reason given by the homemaker for buying less of each of the fruits now was "the family is smaller" (table 5).

Purchasing of Fresh Fruit by Season

Homemakers who had purchased apples, bananas, grapes, peaches, pears, plums or fresh prunes were asked the following questions:

"During which season of the year do you buy the greatest amount of fresh (name of fruit)?"

"What amount of fresh (name of fruit) do you usually buy at a time during (that season)?"

"About how often do you buy (name of fruit) in this quantity during (that season)?"

"In what other seasons do you buy fresh (name of fruit)?"

The official dates of the seasons were not mentioned to the respondents, and they therefore made their own interpretations of them. Consequently, there may be some overlap in, for example, fall-winter and summer-fall.

Fall and winter are the seasons in which most homemakers said they bought the greatest amount of fresh apples. Bananas are bought fairly consistently all year. Grapes are purchased in greatest amounts by more homemakers in the fall, followed by summer, then winter.

Peaches and plums or fresh prunes are bought primarily in the summer; about two-thirds of the purchasers of these fruits said that this was the only season in which they had purchased them. Homemakers mentioned buying more pears in the fall and summer than at other times. Half of the pear users indicated that these were the only seasons in which they had purchased them (table 6).

On the basis of their responses to these same questions, homemakers were grouped into thirds as nearly as possible and classified as high, medium, or low purchasers of each of the six fresh fruits. This was done to provide a basis for further analysis; however, the grouping itself revealed some interesting facts.

In general, the level of purchases of the six fruits was lowest among households with no children or with children all under age 6 and (except for purchases of peaches and pears) in the lower income bracket, among homemakers over 50, and in small households.

Regional variations were slight; however, the level of purchase of grapes, pears, and plums or prunes tended to be lower in the South, while proportionately fewer peaches were purchased in the West than in other regions.

Homemakers living in the large metropolitan areas tended to purchase larger quantities of grapes and plums or fresh prunes (tables 7-12).

It is interesting to note that homemakers who are heavy purchasers of apples also tend to buy large quantities of the other five fruits (table 13).

Homemakers' Suggestions for Increasing Consumer Purchases of Fresh Fruit

In an effort to explore several areas of influence on a customer's buying habits, homemakers were asked what they thought a store manager could do to get his customer to buy more of these 11 fresh fruits. Nearly all the homemakers (94 percent) gave a suggestion. In their opinion, high-quality fruit and attractive displays would be more important influences than other factors in encouraging customers to increase their purchases of fresh fruit. While slightly better than a third of the purchasers of fresh fruit felt that lower prices or sales and specials would get a customer to buy more fruit, better than two-thirds felt higher quality fruit and more attractive displays would accomplish this (table 14).

Fresh Fruits Purchased Last Time

To get further insight into homemakers' buying patterns and also to establish a basis for more detailed analysis, homemakers were asked what specific fruits they had last purchased. Those fruits that had been mentioned most often as having been purchased in the last 12 months were again cited--61 percent said apples, 57 percent bananas, 28 percent oranges, and 20 percent said grapes.¹

No other fruit was mentioned by more than 8 percent of the homemakers. It should be borne in mind, however, that this study was conducted between mid-November and

¹ These percentages add to more than 100 because some homemakers had included more than one kind of fruit in their last purchase. 2,410 homemakers made a total of 4,685 purchases.

and mid-January; therefore, purchases of summer fruits such as peaches and plums would naturally be low.

Although apples were purchased by the largest proportion of homemakers, bananas (which were second to apples as the fruit last purchased) ranked first in the North Central States (table 15).

Circumstance of Last Purchase

For each fruit purchased last time, homemakers were asked to choose from three statements the one that came closest to describing how they decided to buy it.

Of the 4,685 fruits purchased:

- 62 percent were planned before the homemaker entered the store
- 24 percent were planned generally but the homemaker decided on the specific fruit in the store
- 12 percent were not planned at all - the homemaker decided to buy fruit in the store

Homemakers planned their purchases of apples, oranges, bananas and grapefruit much more often than their purchases of pears, grapes, or tangerines (table 16).

These responses were then examined in terms of homemakers rather than in terms of number of fruits purchased. Roughly half (53 percent) of the homemakers planned all of their last purchases of fruit, 15 percent bought all their fruit on impulse, 16 percent made planned and impulse purchases, and 14 percent planned to buy fruit, but decided on the specific fruit in the store. Planned fruit purchases were highest among homemakers in the Northeast (table 17).

PACKAGING OF FRUIT

Homemakers were asked, "Did you buy (name of fruit) loose or already in some kind of bag or container?" Of the total number of fruits purchased, 72 percent were bought loose and 26 percent were bought packaged. Oranges, apples, and grapefruit were bought packaged to a greater extent than bananas, pears, tangerines, or grapes. No other fruit was mentioned as a last purchase by enough homemakers to draw conclusions (table 18).

When the responses were examined in terms of homemakers, rather than in terms of number of purchases, it was found that 61 percent bought all of their last purchases loose, 16 percent bought all of them packaged, and 21 percent bought some loose and some packaged fruit. Purchasing of loose fruit was higher in the West than in the other regions (table 19).

Preference for Loose and Packaged Fresh Fruit

Purchasers of fresh fruit were asked, "In general, would you like to buy fresh fruit that is already in some kind of bag or container, or would you rather buy it loose?" The majority of the homemakers (75 percent) said they would prefer to purchase their fruit loose. Packaged fruit was preferred by 16 percent of the homemakers and 9 percent said they had no preference.

Loose fruit was generally preferred more often by Western homemakers, those living in metropolitan areas, better educated homemakers, and those in the middle and upper income brackets (table 20).

Homemakers who said they usually preferred to buy fresh fruit loose were asked if there were any fresh fruits they did not like to buy this way. Only 10 percent said they preferred to buy some kinds packaged (table 21).

Of the homemakers who said they generally would rather buy fresh fruit packaged, 40 percent said they preferred to buy some kinds loose; they mentioned bananas and grapes more frequently as the fruits they preferred purchasing this way (table 22).

Advantages of Buying Fresh Fruit Loose or Packaged

All homemakers, regardless of their preferences, were asked "What are the advantages of buying fresh fruit loose?" The main responses were:

You get no spoiled, bruised fruit.	54 percent
You can get the number you want	31 percent
You can choose the ones you want.	29 percent
You can get the size you want.	13 percent

Those homemakers who preferred to buy fresh fruit loose naturally tended to cite the advantages of doing so more often than did homemakers who preferred to buy packaged fruit--16 percent of the latter group said that there were no advantages in buying loose fruit. However, "loose fruit is less expensive" was mentioned more often by those preferring to buy packaged fruit than by those preferring to buy loose fruit (table 23).

All homemakers were also questioned about the advantages of buying packaged fresh fruit (table 24). Thirty-six percent said that there was no advantage, though most of these homemakers, naturally, were people who preferred to buy fruit loose. The main advantages mentioned were:

It is time saving.	28 percent
It is not handled.	14 percent
It is more sanitary.	10 percent
It is easy to pick up	9 percent
It is less expensive	9 percent

FRESH FRUIT PROFILE

To understand the homemakers' attitudes toward 15 selected factors in evaluating fruits, two sets of questions were asked--one on the importance attached to the selected factors in buying fruit in general and the other keyed directly to six specific fruits. Two questionnaire forms were used with the order of statements rotated. This was done to minimize position bias in selecting these statements for both questions. The lists contained both positive and negative statements.

The homemakers were asked how they would rate the importance of each when they were considering the purchase of fresh fruits in general--would they rate them very important, fairly important, or not too important (table 28)? "Good for health" (88 percent), "reasonably priced when in season" (79 percent), and "good for snacks or packed lunches" (66 percent) were the positive statements most frequently rated as very important. Negative statements considered most important were "often bruised, blemished" (78 percent), "family does not like them" (75 percent), and "spoils easily" (69 percent).

In interpreting these findings one should consider that the extent to which any factor is important to a homemaker may vary when she is actually considering the purchase of a particular fruit. Thus, although "good for health" was rated "very important" by more respondents than any other factor, it should not be deduced that "good for health" is the homemaker's main consideration when purchasing all fresh fruit.

For each of six fruits--apples, bananas, grapes, peaches, pears, and fresh prunes--homemakers were asked, "Which of these statements do you feel are especially true about (name of fruit)?" While homemakers generally selected the same positive statements for all fruits, the frequency varied according to each fruit's special appeal to the consumer. "Good for health," "good for snacks or packed lunches," and "can be used in many ways"

were selected most often for most of the fruits. However, about 90 percent felt "good for health," and "good for snacks or packed lunches" were "especially" true for apples, compared with 66 and 51 percent, respectively, who felt these statements applied to plums or fresh prunes. "Can be used in many ways" was selected by 86 percent for apples, 63 percent for bananas, and 62 percent for peaches, contrasted with 26 percent for grapes, 30 percent for pears--while only 20 percent felt this statement was "especially" true for plums or fresh prunes (fig. 1). Other positive statements selected (but with much less variation in frequency among fruits) were "reasonably priced when in season," "can buy ready to use without further ripening," "good laxative," and "low in calories." (table 25)

Negative statements, on the other hand, were selected less frequently and generally with proportionately greater variation in frequency. For example, "spoils easily" and "often bruised, blemished" were chosen by between 56 and 42 percent of the homemakers for bananas and peaches, while they were mentioned by only 18 and 5 percent respectively for apples. Other negative statements (not shown in figure 1) were "hard to digest," "hard to find good quality even in season," "hard to find variety liked even in season," "difficult to tell when ripe," and "family does not like them." (table 25)

As explained earlier, each homemaker was classified as a relatively high, medium, or low purchaser of each fruit based on the amount of each fruit purchased during the main purchase seasons. Apples were considered a good laxative by more of the homemakers whose level of purchase was high than of those whose level of purchases was low. Similarly, high purchasers of bananas more often selected "good for snacks or packed lunches," and high purchasers of grapes more often selected "reasonably priced when in season."

Homemakers whose purchases of peaches and pears were high selected "can be used many ways," "reasonably priced when in season," "good laxative," and "good for snacks or packed lunches" more often than did homemakers whose purchases were low. High purchasers of pears also selected "good for health" more often. Low purchasers of peaches, on the other hand, more often selected "difficult to tell when ripe."

For plums, "can be used many ways," "reasonably priced when in season," and "good for snacks or packed lunches" were most often selected by those with high purchase levels. Surprisingly, this same group also selected "often bruised or blemished" and "spoils easily" most often. "Messy to eat" was most often selected by homemakers whose level of purchases of grapes was low.

Analysis of both positive and negative statements selected by nonusers of each of these fruits revealed some interesting differences. As might be expected, positive statements were selected by a somewhat smaller proportion of nonusers than users; however, a higher proportion of nonusers of apples selected "a good laxative" and "low in calories" than did users. The large proportion of nonusers who selected negative statements for the six fruits seemed to reinforce the reasons they gave for not having used them during the past year (table 2). In some instances a smaller proportion of nonusers than users selected negative statements; obviously these characteristics of the fruit had no appreciable effect on homemakers' nonpurchase of them (tables 26 and 27).

Homemakers' Dislike of Fresh Fruit

In order to further evaluate homemakers' attitudes toward apples, apricots, cherries, grapes, nectarines, peaches, pears, pineapple, and plums or fresh prunes, homemakers were questioned on their dislikes, if any, of these fruits.

Relatively high proportions of homemakers considered pineapple hard to prepare and were not familiar with nectarines. No other single criticism of any of the fruits was made by more than 11 percent of those who had purchased some fresh fruit during the last year (table 29).

With the exception of pineapple, better than half of the homemakers said there was nothing they disliked about any of the specific fruits. Of the 63 percent who expressed some dislike of pineapple, over half objected not to the fruit itself but to the difficulty in preparing it. The proportion of homemakers who said there was nothing they disliked about these fruits varied. A relatively high number of homemakers in the West said there was nothing they disliked about apricots, cherries, and nectarines; while generally more of the respondents in the Northeast and South mentioned that they had no dislike of grapes, peaches, pears, pineapple, or plums and fresh prunes. Older homemakers seemed to object the least to apricots, cherries, peaches, and pineapple (tables 30 and 31).

The negative attitudes of homemakers who had bought each of these nine fruits during the past year, and of those who had not, were examined separately. As would be expected, nonpurchasers generally expressed more dislikes and expressed them more frequently than did purchasers. Moreover, the main dislikes of nonpurchasers were different from those of purchasers except for pineapple--both purchasers and nonpurchasers indicated by large proportions that this fruit was difficult to prepare (table 31).

FRESH APPLES

RAW APPLES

Where Fresh Apples are Bought

The use of fresh apples in the home is almost universal. Better than 9 out of 10 homemakers (94 percent) indicated that they had purchased them in the last year.

When homemakers were asked where they purchased apples most frequently, the majority of them mentioned the supermarket. Homemakers were also asked where occasional purchases were made. They made the following replies:

	<u>Most often</u>	<u>Occasionally</u>
	<u>-- Percent --</u>	
Supermarket. ¹	56	16
Grocery store	23	12
Roadside stand	6	22
Orchard farm	6	5
Farmer's market	5	8
No other place	---	32

¹ As defined by the homemaker.

Of the various outlets at which apples were bought, supermarkets were mentioned by a relatively high proportion of Northeastern homemakers, homemakers living in metropolitan areas, and homemakers in the upper income bracket.

Homemakers in rural areas were equally likely to purchase apples from supermarkets and grocery stores. Roadside stands were frequented by a smaller proportion of homemakers living in the South, and in rural areas, homemakers with low incomes, older homemakers, and those with little education. Although fewer homemakers purchased apples at farmers' markets, orchards, and roadside stands, those who did tended to be high purchasers of apples (table 32).

STATEMENTS SELECTED BY HOMEMAKERS ABOUT VARIOUS FRUITS

POSITIVE STATEMENTS

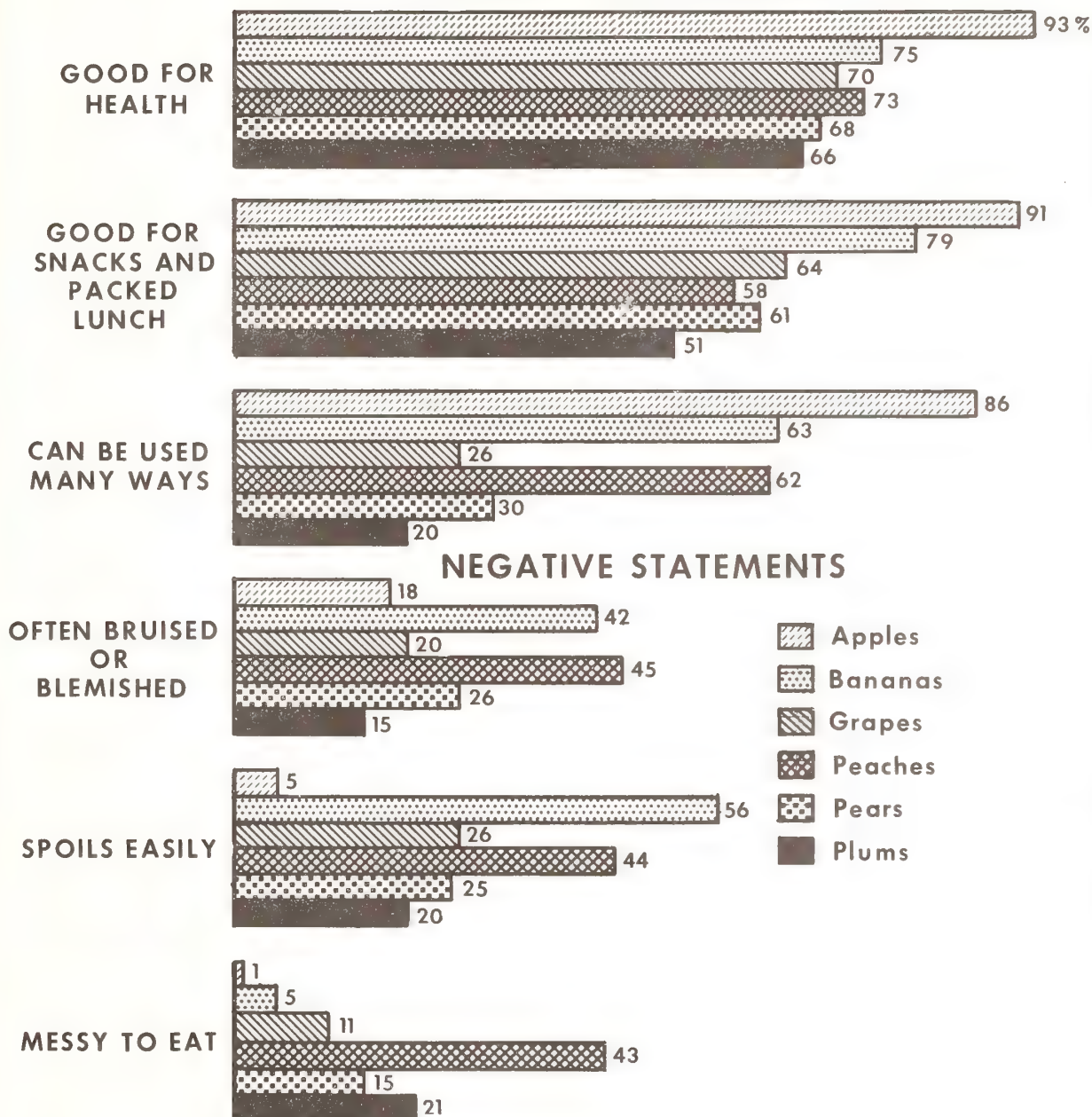


Figure 1

Frequency with Which Apples are Used during Each Season

At the time of the survey the majority of the homemakers said they had used apples at least once a week during all four seasons of the past year:²

	<u>Percent</u>
Once a week during fall and winter.	86
Once a week during the spring.	65
Once a week during the summer	62

Use of apples at least once a week in the fall, winter, and spring was mentioned by higher proportions of Northeastern homemakers and of those in the upper income group, while a higher proportion of homemakers living in large metropolitan areas reported using apples at least once a week in the spring and summer (table 33).

Homemakers' Reasons for Using Fresh Apples Less Often than Once a Week

Homemakers who reported using fresh apples less than once a week during any season were asked why they did not use them more often. The main reasons given varied according to the season under discussion.

Reasons for using less often than once a week	Fall and winter	Spring	Summer
	-- <u>Percent</u> --		
Too expensive	16	20	16
Like a variety of fruits	14	10	5
Fewer people at home	13	6	5
Not as good at this time of year	5	25	20
So many other fruits are available	2	18	35
Less variety available	3	13	14
Number of cases	327	799	881

See table 34 for further details.

A higher proportion of homemakers in the upper income brackets cited "not as good this time of year" as a reason for using apples less often than once a week in the spring. "So many other fruits are available" was mentioned as a reason for infrequent use during summer and spring by a higher proportion of better educated homemakers and those in the upper income brackets. A higher proportion of homemakers with older children said that apples were too expensive to use as often as once a week in the spring and summer. "Less variety available" was mentioned less frequently by homemakers in the west and more often by respondents in the upper income brackets as their reason for using apples less than once a week in the summer. In the spring, homemakers in the West are likely to use fresh apples less frequently than those in the Northeast because they "like a variety of fruits" (table 35).

Ways in Which Homemakers Use Raw Apples in The Home

Homemakers who had purchased apples were asked, "During the past year, in which of these ways have you used raw apples in your home: Eaten out-of-hand? Salads? Fruit cups?" In answer to these questions:

- 97 percent said they had eaten apples out-of-hand
- 63 percent said they had used them in salads
- 31 percent said they had used them in fruit cups

² Official dates of the seasons were not mentioned to the homemakers; they therefore made their own interpretations of them.

Fewer homemakers in the Northeast than in other regions reported using raw apples for salads; fewer North Central homemakers mentioned using apples for fruit cups.

However, proportions eating raw apples out-of-hand did not vary significantly by region (table 36).

Occasions When Fresh Apples Are Eaten Raw

Homemakers who use raw apples were asked, "When are apples eaten raw most often by your family?" and "When else are they eaten this way?" For both questions, a list of possible answers was read to homemakers--"meals at home," "packed lunches," "daytime snacks" and "evening snacks." Raw apples were used most often for daytime snacks; use for evening snacks was also mentioned frequently.

Answers to the questions are shown below:

Occasions when fresh apples are eaten raw	Most often eaten raw	Other times eaten raw	Total
	----- <u>Percent</u> -----		
Daytime snacks.	45	32	77
Evening snacks.	35	42	77
Packed lunches.	19	20	39
Meals at home	8	16	24
No particular time	2	--	2
Number of cases.	2,289	2,289	2,289

Analysis by homemakers' background characteristics revealed several variations from the general pattern of use. The use of raw apples in packed lunches and with meals at home showed the greatest variation among the different population segments.

In comparison with the total results, which show that raw apples were used for packed lunches to a greater extent than for meals at home, they were used to about the same extent for these purposes by Southern homemakers, those in the low income category, and in households without children.

Raw apples are used for packed lunches least often by homemakers in the South, those living in rural areas, those homemakers with lower incomes, those over 50 years of age, those small households, and those in homes where there are no children.

Raw apples are used for meals at home by smaller proportions of homemakers in the Northeast, those living in large metropolitan areas, those in the younger group, and those with children (table 37).

Qualities Homemakers Look for When Choosing Fresh Apples for Eating Raw

In order to establish some criteria for the apple industry in the marketing of their product, the homemakers were asked to select from a list of 23 qualities those they

considered when choosing apples for eating raw and for cooking or baking. The qualities selected most often for apples to be eaten raw were:

<u>Qualities</u>	<u>Percent</u>
Juicy.	87
No blemishes	71
Medium size	65
Firm but not hard	62
No bruises	62
Sweet	50
Deep red color	43
Bright red color	41
Smooth skin	33
Shiny.	26
Hard.	24
Tart	21
Variety or kind of apple	27

Clearly, when looking for fresh apples for eating raw, most homemakers want apples that are red, juicy, unblemished, not bruised, of medium size, firm but not hard, and sweet (table 38).

Varieties of Apples Homemakers Prefer for Eating Raw

Users of raw apples were asked, "Which variety or kind of apples do you prefer for eating raw?" Delicious apples were easily the most frequently mentioned, followed by McIntosh, Jonathan, and Winesap or Stayman Winesap in that order. However, as might be expected, there was considerable variation by region. Certain varieties tended to be more popular in the area where they are grown in the largest quantity. McIntosh apples were more popular in the Northeast; Jonathan apples were more popular in the North Central States. Although overall the most frequently mentioned, the Delicious apple was preferred most by homemakers in the South and West. However, there was little regional variation in the proportions who selected the Winesap or Stayman Winesap.

Main varieties of apples preferred for eating raw	U.S. total	Northeast	North Central States	South	West
	-- <u>Percent</u> --				
Delicious.	58	44	57	62	72
McIntosh.	23	60	16	5	9
Jonathan	17	1	40	5	26
Winesap or Stayman Winesap	16	11	13	23	14
Number of cases.	2,289	590	669	714	316

See table 39 for further information.

As mentioned before, homemakers were asked to select from a list of 23 qualities those they preferred when choosing eating apples. The qualities selected were examined in terms of the varieties they preferred. However, only four varieties were mentioned by enough homemakers to permit analysis.

Regardless of the variety preferred, homemakers wanted a juicy apple without blemishes or bruises, of medium size, and firm, but not hard. However, when Delicious or McIntosh was the preferred variety, "sweet" was most often selected as a quality

looked for in an eating apple; while Jonathan or Winesap or Staymen Winesap apples were preferred by those who looked for a "tart" apple.

Deep red color was most often mentioned by the homemaker preferring Delicious or Winesap or Stayman Winesap apples; bright red was looked for by those preferring Jonathan apples.

Qualities looked for	Varieties preferred for eating raw			
	Delicious	Jonathan	Winesap or Stayman Winesap	McIntosh
	-- <u>Percent</u> --			
Juicy.....	90	90	86	85
No blemishes or spots.....	73	79	69	71
No bruises.....	65	69	60	60
Medium size.....	64	71	66	67
Firm, but not hard.....	64	62	59	67
Sweet.....	57	44	40	46
Deep red.....	46	37	44	39
Bright red.....	41	49	41	42
Tart.....	18	36	39	18
Smooth skin.....	34	36	34	31
Number of cases.....	1,317	393	357	531

See table 40 for further details.

APPLES FOR COOKING

Use of Fresh Apples for Cooking or Baking

Homemakers who had bought fresh apples in the preceding year were asked, "During the past year, have you used fresh apples for cooking or baking?" Eighty-four percent said that they had used them for this purpose. The proportions were highest among:

- homemakers in the North Central States
- homemakers in rural areas
- homemakers aged 36 and over
- households with children over 6 years of age
- homemakers either not employed or employed part time
- homemakers with high or medium levels of apple purchases

See table 41.

Homemakers who reported not having used fresh apples for cooking or baking in the past year gave a variety of reasons for this (table 44). The following reasons were mentioned by 10 percent or more of these homemakers:

	<u>Percent</u>
Prefer raw apples.....	23
No time to bake.....	21
Not worth the effort.....	16
Do not bake.....	12
Buy canned applesauce.....	10
Have little or no cooking experience.....	10
Use canned cooking apples.....	10

Ways in Which Fresh Apples Are Used for Cooking or Baking

Users of fresh apples for cooking or baking were asked, "During the past year, in which of these ways have you used fresh apples for cooking or baking; homemade applesauce, baked apples, apple cake, apple pie, other desserts, some other way?": 84 percent said apple pie, 66 percent said baked apples, 64 percent said homemade applesauce, and 30 percent said apple cake.

While the use of fresh apples for baking apple pie was mentioned more often than the other uses by homemakers in all segments of the population, homemakers in the Northeast and the West, in large metropolitan communities, and in households without children were less likely to bake apple pies. In general, however, larger proportions of homemakers in these segments of the population made applesauce.

Baked apples seemed to be favored more by older homemakers and those without children. Apple cake tended to be a regional specialty, with higher proportions of homemakers in the Northeast and North Central areas using apples this way. Over one-third of the respondents mentioned other desserts but no one specific dessert was cited often enough to warrant a detailed discussion (table 45).

Proportions of All Fresh Apples Bought That Are Used for Cooking or Baking

Homemakers who had used fresh apples for cooking or baking were asked, "What percentage of all the fresh apples bought during the past year did you use for cooking or baking?":

- 11 percent said they had used 75 percent or more of all their fresh apples for cooking or baking
- 28 percent said they had used between 50 percent and 74 percent for cooking and baking
- 29 percent said they had used between 25 and 49 percent
- 31 percent said they had used less than 25 percent

The level of purchase of apples apparently was unrelated to the proportion of fresh apples used for cooking or baking. About 40 percent of homemakers in both the high-purchase and low-purchase groups used half or more of the fresh apples they purchased for cooking or baking.

In general, there was little variation in the proportion of apples used for cooking or baking by homemakers in various segments of the population; however, comparatively high proportions of homemakers over 50, those in households without children and those living in small households said that they used 75 percent or more of the fresh apples purchased during the past year for cooking and baking (table 46).

Qualities Looked for in Apples for Cooking or Baking

When homemakers choose apples for cooking or baking, color is not as important as it is when they choose apples for eating raw, nor is there as much agreement among them on preference for a particular color. In a "cooking" apple, the homemaker is more concerned with getting a juicy one that is firm but not hard, tart, of medium size, without blemishes or bruises.

The following qualities were selected most often for cooking or baking apples:

<u>Qualities</u>	<u>Percent</u>
Juicy.	68
No blemishes	55
Medium size.	51
No bruises	49

<u>Qualities--Con.</u>	<u>Percent</u>
Firm, but not hard.	47
Tart	43
Hard	27
Part red, part green	25
Green	23
Bright red	23
Sweet	20
Variety or kind of apple	25

The variety or kind of apple to use (the only other factor on the list mentioned by as many as 1 in 4), was of as much concern to homemakers when choosing fresh apples for cooking or baking as it was when choosing apples for eating raw.

Preference for color of apples for cooking or baking varied somewhat among regions. In the North Central States, part red, part green, and bright red apples were preferred to a greater extent than green or deep red apples. Green apples were preferred by a majority of the homemakers in the West and by very few in the South (table 42).

Varieties or Kinds of Apples Homemakers Prefer for Cooking or Baking

The majority of homemakers who used apples for cooking or baking indicated that sometimes they bought a certain variety especially for this purpose. A little over one-fourth (27 percent) indicated that they did not buy a special variety. The main reasons for not doing so were "prefer an all-purpose apple," "use whatever is on hand," or "use eating apples whose qualities they prefer" (table 47).

All homemakers who used fresh apples for cooking or baking were asked: "Which variety or kind of apples do you prefer for cooking or baking?" As was true in homemakers' preferences of varieties for eating raw, preferences in varieties to be used for cooking or baking varied considerably from region to region. Winesap or Stayman Winesap most frequently headed the list in the South. McIntosh was the most popular variety in the Northeast, Jonathan in the North Central States, and Pippin was more popular in the West.

Main varieties of apples preferred for cooking or baking	U.S. total	Northeast	North Central States	South	West
	-- <u>Percent</u> --				
Winesap or Stayman Winesap.	21	10	15	41	12
McIntosh	17	39	16	3	8
Jonathan	17	2	35	11	19
Pippin	4	--	*	*	30
Delicious	9	7	7	13	13
Number of cases	1,930	508	598	574	250

*Less than 1 percent.

See table 43 for further details.

Homemakers' preferences for different varieties of apples were examined in terms of all the qualities they said they look for when choosing fresh apples for cooking or baking. Regardless of the variety they preferred, homemakers looked mainly for apples

that are juicy, unblemished, of medium size, firm but not hard, and tart. There were exceptions, however. For example, homemakers who preferred Delicious or McIntosh apples mentioned tart less frequently as a quality looked for.

Qualities looked for	Winesap or Stayman Winesap	McIntosh	Jonathan	Delicious
	-- <u>Percent</u> --			
Juicy.	69	73	72	73
No blemishes or spots	55	57	62	60
Medium size.	59	45	60	56
No bruises.	50	49	64	52
Tart.	52	33	49	29
Firm but not hard	47	54	62	56

See table 40 for further details.

PROBLEMS WITH APPLES

Difficulty in Finding Good Fresh Apples

Homemakers were asked what difficulties they had encountered in purchasing fresh apples for any use during the past year. Only about one in seven (14 percent) mentioned any problems. Most said that they had encountered these problems mainly during the spring and summer. They were also asked if the difficulty occurred in purchasing any special variety or kind of apple. Less than half of those who had difficulty said that it did; no one variety was mentioned by as many as one-fourth (tables 48-49).

Incidence of Disappointment in Apples Bought during the Past Year

Homemakers who had purchased fresh apples during the past year were asked, "Have you been disappointed in apples that you have bought during the past year?" About one in four (28 percent) said that they had been.

Disappointment was expressed by a higher proportion of homemakers in the West than in other regions (table 50).

Those who had been disappointed were asked, "In what ways?"

- 25 percent referred to interior blemishes and deterioration
- 22 percent said the apples were dry
- 21 percent said they were soft, mushy, soggy
- 16 percent said they had no taste, were flat
- 15 percent said they were bruised, blemished
- 13 percent said they were mealy, powdery
- 11 percent referred to complete spoilage
- 11 percent said they were sour, not sweet
- 10 percent said they were too hard

See table 51 for further details.

When asked where they had bought the apples they did not like, 61 percent of the homemakers cited supermarkets and 21 percent mentioned grocery stores. No other place was mentioned by more than 6 percent of the homemakers (table 52).

The following tabulation shows the various outlets where homemakers purchased apples most often and the percentage who were disappointed in the apples purchased from these outlets.

	<u>Purchased most often</u>	<u>Disappointed in apples</u>
	<u>-- Percent --</u>	
Supermarkets.	56	61
Grocery stores.	23	21
Roadside stands	6	6
Farmers' market	5	4
Orchard, farm	6	2

Obviously, the incidence of purchase from an outlet closely paralleled the proportion of homemakers who expressed disappointment in apples purchased from these outlets. Purchases from orchards or farms seemed to be less disappointing, however too few homemakers mentioned such purchases to be conclusive.

Incidence of Purchasing Substitutes for Fresh Apples

All homemakers who had purchased fresh apples during the past year were asked, "Have you bought something else at any time in the past year when you would have preferred to buy apples?" Only about one in seven homemakers (14 percent) said they had. When asked what they had bought the last time this happened, almost half said they had purchased bananas, and a smaller proportion mentioned oranges. No other fruit was mentioned by as many as a tenth of those who bought substitutes (table 53).

When asked what circumstance led to their buying a substitute, about two-fifths mentioned poor quality--the apples available were either old, dried up, bruised, or just didn't look good. About one-fifth stated that price was a factor (table 54).

APPLESAUCE

INCIDENCE OF PURCHASING PROCESSED APPLESAUCE DURING THE PAST YEAR

All homemakers interviewed, including the 39 homemakers who said they had not bought any fresh fruit during the past year, were asked about their purchases of applesauce during the past 12 months. The 71 percent who had purchased it included a relatively high proportion of homemakers living in the Northeast and in metropolitan areas, better educated homemakers, and homemakers in the upper income brackets.

Earlier in the interview, homemakers were asked whether or not they had used fresh apples for making applesauce. The results of both questions revealed that better than 8 in 10 had used some type of applesauce during the past year--36 percent had used both processed and homemade applesauce, almost an equal proportion had used processed only, and 14 percent said they had used only homemade applesauce (table 55).

Purchasers of processed applesauce were asked, "How do you generally use the applesauce you buy?"

- 62 percent said as a side dish with meat
- 42 percent said as a dessert
- 12 percent said in recipes for cake, cookies
- 8 percent said as a garnish on meat
- 5 percent said as a breakfast fruit
- 5 percent said with pancakes

See table 56 for more detailed information.

Purchasers of processed applesauce were also asked, "Which do you prefer, home-made applesauce or the kind you buy in a store?"

45 percent said they preferred homemade applesauce
 36 percent said they preferred processed applesauce
 19 percent said they had no preference

Preference for homemade applesauce was strongest among homemakers in the Northeast and those in the North Central States (table 57).

As might be expected, the majority of homemakers who had used both processed and homemade applesauce preferred the homemade variety, while the largest proportion of those who had not used any homemade applesauce during the past year preferred the processed.

	Homemakers who had--	
	<u>Used both home- made and proc- essed applesauce</u>	<u>Used processed applesauce only</u>
	<u>Percent</u>	<u>Percent</u>
Preferred homemade applesauce.	63	26
Preferred processed applesauce.	19	54
No preference	18	20
Number of cases	896	851

Homemakers' main reasons for preferring homemade applesauce were that they could flavor it to their own taste, that it had a better taste than processed applesauce, and that it had a fresh taste. Those who preferred processed applesauce gave "more convenient" as their main reason (table 58).

HOMEMAKERS' OPINIONS ABOUT THE WAY GOOD APPLESAUCE SHOULD LOOK AND TASTE

How should applesauce look and taste? Should it be thick and chunky or thin and smooth? To get this information, all homemakers were asked to describe how "good" applesauce should look and taste.

Homemakers were about equally divided in their taste preferences--27 percent preferred a sweet applesauce and 23 percent wanted one that was not too sweet and not too tart. They also preferred a medium-thick, smooth applesauce that was yellowish or light in color (table 59).

To get as complete a description as possible of color and consistency preferences, homemakers who did not mention them were asked their preferences for these two factors.

About a fourth of the homemakers voluntarily stated a preference for medium-thick applesauce; about one in eight expressed a preference for thick applesauce. When asked directly, equal proportions mentioned these two factors.

On color, the largest proportion of homemakers voluntarily expressed a preference for yellow applesauce; the next highest proportion preferred a light-colored applesauce. When homemakers who did not mention color were asked their preference, the relative positions of the two did not change, but the proportion preferring yellow applesauce was clearly the largest (table 60).

The opinions of homemakers preferring homemade applesauce and those preferring canned applesauce were examined separately.

Basically, the two groups did not differ in what they considered "good" applesauce; however, there were some variations in taste and color preferences. Those who preferred homemade applesauce were more likely to prefer cinnamon or other spices as a seasoning. While homemakers preferred yellow or light-colored applesauce, a large proportion of those who preferred the homemade variety expressed a preference for tan or pink applesauce (table 61).

PROCESSED FRUITS

In order to get a complete picture of the use of noncitrus fruit, one must get information on both fresh and processed fruits.

Homemakers were asked which of nine canned fruits they had purchased during the last year. It was found that:

- 86 percent said they had bought canned pineapple
- 86 percent said they had bought canned fruit cocktail or salad
- 83 percent said they had bought canned peaches
- 65 percent said pears
- 43 percent said apricots
- 36 percent said sweet cherries
- 34 percent said apples
- 32 percent said plums or prunes
- 28 percent said sour cherries

Only 3 percent of the homemakers had not bought any of these canned products.

In general, these products had been purchased by larger proportions of homemakers in the higher income brackets and those with better educations.

In the Northeast, fewer homemakers had bought sour cherries and apples; in the South, smaller proportions had bought fruit cocktail or salad, pears, apricots, and plums or prunes. Purchases of sweet cherries were reported by fewer of the homemakers in the West (table 62).

Homemakers' purchases of canned fruits were compared with their purchases of fresh fruits. Purchases of all canned fruits except pineapple were highest among homemakers who had bought the same fresh fruits during the past year (table 63).

JUICES

Juices, a natural byproduct of fresh fruits, are also of interest in a study such as this. Therefore, homemakers were asked which of four noncitrus juices they had purchased in the past 12 months.

- 63 percent said they had bought grape juice
- 62 percent said they had bought pineapple juice
- 40 percent said they had bought prune juice
- 38 percent said they had bought apple juice
- 13 percent said they had bought none of these juices

As with canned fruit, homemakers who purchased the four juices tended to have higher incomes and to be better educated. A relatively larger proportion of homemakers living in the Northeast, in the West, and in large metropolitan areas purchased apple juice. Homemakers living in the Northeast and in metropolitan areas were more likely to purchase prune juice (table 64).

PRUNES

Prunes are well known in American households. More than 7 out of 10 homemakers said they had used either canned prunes, dried prunes or prune juice during the past year; almost 5 in 10 had used at least two forms of prunes; and about 6 in 10 said they had used dried prunes. Over half of the latter group mentioned that they had served dried prunes at least once a month.

- 6 percent said they served dried prunes more than once a week
- 8 percent served them once a week
- 18 percent served them two or three times a month
- 23 percent served them once a month
- 44 percent served them less than once a month

Smaller proportions of the younger homemakers said they had used prunes during the past year. Also, this group had used prunes less frequently than the older groups. Among homemakers under 36 years of age, only 47 percent had used prunes; among homemakers 36 and older, 64 percent had used them. Use of prunes at least once a month was reported by 35 percent of those under 36 years of age and from 54 to 64 percent of those 36 and over (tables 65, 66, 67).

Attitudes Toward Prunes

The homemaker's major reason for using prunes is that it has a laxative quality--over 4 out of 10 mentioned this. Reasons related to health were mentioned by 2 users in 10. No other reason was given by as many as 2 out of 10 homemakers (table 68).

Most users could find no fault with prunes--only about 1 in 10 indicated that there was something they did not like about using dried prunes. In answer to the question, "What, if anything, don't you like so well about them?" the only criticisms made by as many as 3 percent were about price, taste, and the presence of pits or seeds (table 69).

Homemakers' main reasons for buying dried prunes were examined in terms of the frequency with which they use them. Homemakers who thought prunes served as a laxative, were good for health, and could be used as a breakfast fruit tended to use them more frequently than other homemakers. As might be expected, those who liked them for variety tended to use them least often (table 70).

Homemakers who said they had not purchased dried prunes during the past year were asked, "How come you don't buy dried prunes?" Many of their reasons were general: "don't care for them," "just don't bother to buy them," "prefer other forms of the fruit." About 2 in 10 commented that they disliked the taste. A small proportion felt that dried prunes were too expensive or said they preferred other fruit (table 71).

RAISINS

The proportion of homemakers in the United States who reported they used raisins in their homes during the past year had not changed since a previous study conducted in 1957.³ Then, as now, 83 percent of the American homemakers used raisins. Homemakers in the West tended to use raisins more frequently than those in other regions, although the reported incidence of use did not vary significantly. A larger proportion of families with children used raisins; these families also used them more frequently. However, there has been a significant shift in the frequency of use of raisins. In the previous study, 71 percent of the homemakers said they served them once a month or more, contrasted with 63 percent in this study (tables 72 and 73).

³ Hochstim, Esther S. Homemakers Appraise Citrus Products, Avocados, Dates and Raisins. U.S. Dept. Agr. Mktg. Res. Rpt. 243, June 1958.

APPENDIX

SAMPLE DESIGN

The universe represented by the sample consists of homemakers residing in the 48 contiguous states. The homemaker is defined as the person in the household with major responsibility for purchasing and preparing food.

Since a full description of the sample design would take several pages and would be of little interest to most readers, only a few of the key characteristics of the sample will be given. It was a multistage probability sample with appropriate stratification at each level of selection and the use of probabilities proportional to size. The sample design and selection process contained a provision that each household in the population have an equal chance of being in the sample. In other words, the sample was self-weighted.

The three categories of communities for which data are presented in this report correspond to three major strata used in the design of the sample:

Large metropolitan areas: urbanized areas (as defined in the 1960 census) with a population of 1 million or more.

Small metropolitan areas: urbanized areas with a population of less than 1 million and all other urban places of 2,500 or more inhabitants.

Nonmetropolitan areas: towns of less than 2,500 and open country farm and nonfarm population.

SAMPLING ERROR

For unrestricted random samples, the standard deviation of a given proportion is calculated by the formula $\sqrt{\frac{p(1-p)}{n}}$ where 'p' represents the proportion responding, and 'n' represents the sample size. For the type of sample and questions involved in this survey the statistical efficiency is approximately equivalent to unrestricted random samples of half the size. Accordingly, approximate standard deviations of proportions in this study can be derived by using the formula $\sqrt{\frac{2p(1-p)}{n}}$.

The magnitude of the sampling error varies with the size of the percentage being estimated and the number of cases upon which the percentage is based. The tabulation below presents approximations of sampling variability for selected percentages and numbers of cases.

Standard error of estimated percentage

Estimated percentage	Number of respondents on which percentage is based					
	100	250	500	750	1,000	2,454
	(in percentage points)					
2 or 98.....	1.97	1.25	.89	.72	.62	.40
5 or 95.....	3.07	1.95	1.38	1.12	.97	.62
10 or 90.....	4.23	2.68	1.90	1.55	1.34	.86
25 or 75.....	6.10	3.87	2.74	2.23	1.93	1.24
50.....	7.04	4.46	3.16	2.58	2.23	1.43

TABLES

The following detailed tables show the percentage distribution of homemakers who responded to the questions asked in this survey. Except for a few instances where similar questions have been grouped for ready comparison, the tables are arranged in questionnaire order.

The groupings according to size of community were described in the previous section on sample design.

The income categories represent total family income before taxes as reported by the homemakers interviewed. "Upper" includes annual incomes reported as \$7,000 or more, "middle" those from \$4,000 up to \$7,000, "lower" those under \$4,000.

Households are classified according to size as small (one or two members), medium (three or four members), and large (five or more members).

Cases classified by family composition, income, education, age, and other groupings may add to less than the total number of homemakers because of a few unclassified respondents.

Table 1.--All homemakers: "Now will you look at each fruit on this card and tell me which of these fresh fruits have you or your family bought in the past 12 months?"¹

Background characteristics	Apples	Apricots	Bananas	Cherries	Grapes	Nectarines	Oranges	Peaches	Pears	Pine-apple	Plums or fresh prunes	Cases
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Number
United States total-----	94	22	96	48	89	39	90	86	68	29	66	2,454
Region:												
Northeast-----	94	25	95	70	89	46	91	89	81	38	82	637
North Central-----	94	19	96	46	89	33	89	84	63	28	68	716
South-----	96	11	96	27	89	29	92	86	63	22	49	742
West-----	89	43	96	54	87	55	87	84	69	30	68	359
Size of community:												
Large metropolitan areas--	95	29	94	62	90	50	89	87	77	39	78	945
Small metropolitan areas--	95	19	96	45	90	36	88	88	69	28	67	676
Nonmetropolitan areas----	93	15	98	33	87	27	93	83	58	19	51	833
Family income:												
Upper-----	97	26	99	61	95	52	94	92	79	38	80	700
Middle-----	94	20	98	49	91	36	91	86	67	26	68	807
Lower-----	91	19	91	32	81	29	85	79	61	22	51	654
Education of homemaker:												
No high school-----	90	20	93	37	83	29	87	79	63	25	56	603
Some high school-----	96	16	96	39	89	34	90	85	63	21	59	519
High school graduate----	95	23	97	53	92	43	92	88	71	30	71	860
College-----	96	28	98	61	91	48	92	91	76	41	75	464
Age of homemaker:												
Under 36 years-----	97	16	97	46	91	37	91	85	66	24	66	791
36 - 50 years-----	96	23	97	53	92	43	92	90	73	32	71	834
Over 50 years-----	90	26	93	43	83	35	87	82	66	30	59	812
Family composition:												
No children-----	90	23	92	44	82	35	85	82	66	30	60	1,025
Children under 6 only----	97	16	99	48	93	36	91	89	68	22	66	318
Children 6 - 17 only----	98	23	99	53	94	45	95	90	74	32	72	691
Children in both age groups-----	97	18	98	48	93	39	95	87	66	28	70	420
Size of household:												
Small-----	89	22	91	41	81	34	83	81	64	29	58	851
Medium-----	97	22	98	54	93	43	93	88	72	29	71	898
Large-----	97	20	99	48	94	39	95	88	68	28	68	705

¹ Percentages add to more than 100 because some respondents gave more than 1 fruit.

Table 2.--Homemakers who had not purchased fresh fruit in the past 12 months: "Why haven't you bought fresh (FRUIT) in the past year?"¹

Reasons	Apples	Apricots	Bananas	Cherries	Grapes	Nectarines	Oranges	Peaches	Pears	Pineapple	Plums or fresh prunes
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Have own trees; friends, relatives supply them-----	62	5	3	11	27	1	13	32	36	(*)	23
Health reasons-----	15	3	42	4	15	2	21	11	5	7	7
I/we don't like them-----	7	15	11	11	11	9	6	6	12	6	15
Prefer other fruits-----	5	8	11	9	12	12	9	7	7	4	10
Texture reasons-----	5	4	--	(*)	--	2	1	2	8	2	2
Too expensive-----	3	9	8	22	14	10	17	13	9	8	9
Dislike taste (general)-----	1	10	8	4	1	6	1	1	4	2	6
Tart; too sour; bitter-----	1	7	--	6	1	3	2	--	1	8	10
Ripening and spoilage problems-----	1	2	8	1	1	(*)	(*)	3	4	1	1
Nonavailability-----	--	22	--	12	3	16	2	6	4	7	7
Prefer canned/dried forms-----	--	6	--	10	--	--	13	5	5	13	5
Other taste reasons-----	--	6	--	2	2	3	1	2	3	2	1
Not familiar with fruit-----	--	5	--	1	1	33	1	1	(*)	4	1
Canned/dried fruit tastes better-----	--	2	--	1	--	--	--	1	1	5	1
Dislike skin, fuzz-----	--	2	--	--	1	(*)	--	6	(*)	--	1
Hard to prepare-----	--	1	--	5	(*)	(*)	2	2	1	42	1
Dislike pits, seeds, core-----	--	(*)	--	4	4	--	--	--	1	--	(*)
Messy to eat-----	--	(*)	--	(*)	1	(*)	6	2	1	(*)	1
All other reasons-----	--	1	--	1	1	(*)	1	--	(*)	2	(*)
Not ascertained-----	2	2	9	4	7	5	7	5	2	3	4
Number of cases-----	108	1,886	64	1,247	236	1,471	204	311	738	1,703	802

¹ Percentages may add to more than 100 because some respondents gave more than 1 reason.
 *less than 1 percent.

Table 3.--Homemakers who had purchased fresh fruit in the past 12 months: "Would you say the amount of (FRUIT) you have bought in the past 12 months is more, less, or about the same as the amount bought, say, 5 years ago?"

Background characteristics	Apples			Bananas			Grapes			Peaches		
	More	Less	About the same	Cases	More	Less	About the same	Cases	More	Less	About the same	Cases
	Percent	Percent	Percent	Number	Percent	Percent	Percent	Number	Percent	Percent	Percent	Number
United States total-----	41	14	45	2,307	36	10	54	2,351	30	12	58	2,179
Region:												
Northeast-----	41	13	46	596	37	12	51	605	32	10	58	569
North Central-----	44	17	39	675	41	11	48	688	33	15	52	636
South-----	36	13	51	715	31	8	61	711	25	12	63	660
West-----	45	12	43	321	34	12	54	347	29	12	59	314
Size of community:												
Large metropolitan areas-----	43	15	42	891	39	10	51	889	34	12	54	853
Small metropolitan areas-----	44	15	41	640	36	10	54	646	31	11	58	605
Nonmetropolitan areas--	35	13	52	776	33	11	56	816	24	13	63	721
Family income:												
Upper-----	52	9	39	680	44	10	46	687	38	10	52	666
Middle-----	45	13	42	755	42	8	50	788	33	11	56	732
Lower-----	28	19	53	596	25	14	61	598	20	17	63	530
Education of homemaker:												
No high school-----	25	20	55	540	21	14	65	558	18	15	67	498
Some high school-----	39	13	48	498	37	8	55	497	27	13	60	461
High school graduate--	49	10	41	818	42	8	50	837	36	10	54	791
College-----	48	14	38	444	42	13	45	452	34	12	54	423
Age of homemaker:												
Under 36 years-----	65	5	30	765	61	4	35	768	50	7	43	719
36 - 50 years-----	39	14	47	797	32	10	58	813	27	12	61	767
Over 50 years-----	18	23	59	730	14	17	69	754	11	19	70	677
Family composition:												
No children-----	21	23	56	918	17	17	66	943	15	19	66	843
Children under 6 only--	66	6	28	310	68	2	30	313	53	6	41	297
Children 6-17 only----	41	11	48	672	33	10	57	682	27	10	63	650
Children in both age groups-----	66	3	31	407	62	2	36	413	49	5	46	389
Size of household:												
Small-----	21	24	55	753	17	18	65	775	15	19	66	690
Medium-----	44	11	45	869	38	8	54	881	31	11	58	831
Large-----	59	6	35	685	54	5	41	695	44	7	49	658

Table 4.--Homemakers who indicated they had purchased more (fruit) in the past year than 5 years ago: "Why are you buying more (FRUIT) now?"¹

Reasons	Apples	Bananas	Grapes	Peaches
	Percent	Percent	Percent	Percent
Family is larger-----	42	41	42	42
Children are older, old enough to eat them-----	39	39	36	32
Use them for packed lunches, snacks-----	9	9	7	5
We bake/can/freeze more-----	7	2	1	12
Health reasons-----	6	8	6	5
We prefer them, eat more of them-----	5	5	8	6
Availability-----	4	2	5	4
I/we have found new/more uses for them-----	3	7	1	3
They are less expensive-----	3	6	2	3
They are a substitute for sweets-----	2	2	2	2
Like the taste-----	2	1	3	1
Can afford them now-----	2	1	1	2
They are easy to eat/serve; children can handle them-----	1	2	3	1
Better quality (general)-----	1	1	2	2
We entertain more-----	1	1	1	(*)
They are juicier-----	1	(*)	1	1
All other reasons-----	2	1	1	2
Not ascertained-----	1	1	1	2
Number of cases-----	940	846	648	590

¹ Percentages may add to more than 100 because some respondents gave more than 1 reason.

* Less than 1 percent.

Table 5.--Homemakers who indicated they had purchased less (fruit) in the past year than 5 years ago: "Why are you buying less (FRUIT) now?"¹

Reasons	Apples	Bananas	Grapes	Peaches
	Percent	Percent	Percent	Percent
Family is smaller-----	57	58	46	36
They're too expensive-----	9	7	12	13
We are eating less; don't care for them as much-----	8	9	12	6
Health reasons-----	6	10	7	4
Don't cook/can/freeze them-----	6	1	2	23
Have own trees; friends, relatives supply them-----	6	--	5	4
The children are older and don't like them as much-----	4	9	3	2
Fewer meals are eaten at home-----	4	4	3	3
They have fewer uses-----	2	4	3	1
Dislike the taste-----	2	1	2	4
Poor quality (general)-----	2	(*)	4	8
Ripening problems-----	1	2	2	6
Nonavailability-----	1	--	5	10
We buy them canned-----	(*)	(*)	--	4
All other reasons-----	1	(*)	1	(*)
Not ascertained-----	(*)	1	3	2
Number of cases-----	321	245	266	326

¹ Percentages may add to more than 100 because some respondents gave more than 1 reason.

* Less than 1 percent.

Table 6.--Homemakers who had purchased fresh fruit in the past 12 months:

"During which season of the year do you buy the greatest amount of fresh (FRUITS)? In what other seasons do you buy fresh (FRUIT)?"

Fresh fruits	Spring	Summer	Fall	Winter	All year around	No other season	Cases
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Number</u>
Apples ¹							
Greatest amount	2	7	61	28	10	--	2,307
Other purchases	45	41	20	48	--	13	2,307
Total-----	47	48	81	76	10	13	2,307
Bananas ¹							
Greatest amount	5	17	17	20	44	--	2,351
Other purchases	32	25	29	24	--	6	2,351
Total-----	37	42	46	44	44	6	2,351
Grapes ¹							
Greatest amount	2	39	42	14	7	--	2,179
Other purchases	14	16	27	28	--	30	2,179
Total-----	16	55	69	42	7	30	2,179
Peaches ¹							
Greatest amount	4	81	15	1	1	--	2,104
Other purchases	11	7	17	4	--	65	2,104
Total-----	15	88	32	5	1	65	2,104
Pears ¹							
Greatest amount	2	41	47	8	2	--	1,677
Other purchases	8	11	17	19	--	50	1,677
Total-----	10	52	64	27	2	50	1,677
Plums or fresh ² prunes							
Greatest amount	4	68	21	3	2	--	1,613
Other purchases	8	8	15	7	--	63	1,613
Total-----	12	76	36	10	2	63	1,613

¹ Percentages may add to more than 100 because some respondents had purchased fruit in more than one season.

² Percentages do not add to 100 because some respondents did not indicate what season they purchased the "greatest amount" in.

Table 7.--Homemakers who had purchased fresh apples in the past 12 months:

"What amount of fresh apples do you usually buy at a time during the season when greatest amount purchased? About how often do you buy apples in this quantity during that season?"¹

Background characteristics	Apple purchase levels ²				Cases
	High	Medium	Low	No answer	
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Number</u>
United States total-----	32	42	24	2	2,307
Region:					
Northeast-----	31	45	22	2	596
North Central-----	33	40	26	1	675
South-----	31	42	25	2	715
West-----	32	42	23	3	321
Size of community:					
Large metropolitan areas-----	27	46	26	1	891
Small metropolitan areas-----	33	41	24	2	640
Nonmetropolitan areas-----	35	39	24	2	776
Family income:					
Upper-----	36	45	18	1	680
Middle-----	33	43	22	2	755
Lower-----	26	38	33	3	596
Age of homemaker:					
Under 36 years-----	31	45	23	1	765
36 - 50 years-----	38	42	19	1	797
Over 50 years-----	25	41	32	2	730
Family composition:					
No children-----	21	41	35	3	918
Children under 6 only-----	23	46	30	1	310
Children 6-17 only-----	39	45	15	1	672
Children in both age groups---	49	38	12	1	407
Size of household:					
Small-----	18	40	39	3	753
Medium-----	31	47	21	1	869
Large-----	47	39	13	1	685

¹ The purchase levels are approximate, since they are based on homemakers' memories of the amounts they normally buy at a time and on the amounts they buy each time. Also the official dates of the seasons were not mentioned to the homemakers, who therefore made their own interpretations of them.

² The total amounts homemakers reported they had purchased were grouped roughly into thirds.

Table 8.--Homemakers who had purchased fresh bananas in the past 12 months:
 "What amount of fresh bananas do you usually buy at a time during the
 season when greatest amount purchased? About how often do you buy bananas
 in this quantity during that season?"¹

Background characteristics	Banana purchase levels				
	High	Medium	Low	No answer	Cases
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Number</u>
United States total-----	33	34	31	2	2,351
Region:					
Northeast-----	33	37	28	2	605
North Central-----	32	34	32	2	688
South-----	32	35	32	1	711
West-----	35	29	32	4	347
Size of community:					
Large metropolitan areas-----	35	35	28	2	889
Small metropolitan areas-----	33	33	31	3	646
Nonmetropolitan areas-----	29	34	35	2	816
Family income:					
Upper-----	36	35	27	2	687
Middle-----	35	35	28	2	788
Lower-----	27	33	38	2	598
Age of homemaker:					
Under 36 years-----	36	34	28	2	768
36 - 50 years-----	39	32	28	1	813
Over 50 years-----	23	36	38	3	754
Family composition:					
No children-----	19	35	43	3	943
Children under 6 only-----	30	38	31	1	313
Children 6-17 only-----	41	32	25	2	682
Children in both age groups---	52	30	16	2	413
Size of household:					
Small-----	16	36	45	3	775
Medium-----	33	36	30	1	881
Large-----	50	30	18	2	695

¹ See footnotes to table 7.

Table 9.--Homemakers who had purchased fresh grapes in the past 12 months:

"What amount of fresh grapes do you usually buy at a time during the season when greatest amount purchased? About how often do you buy grapes in this quantity during that season?"¹

Background characteristics	Grape purchase levels				Cases
	High	Medium	Low	No answer	
	Percent	Percent	Percent	Percent	Number
United States total-----	36	31	30	3	2,179
Region:					
Northeast-----	44	30	24	2	569
North Central-----	31	34	33	2	636
South-----	31	29	37	3	660
West-----	48	27	21	4	314
Size of community:					
Large metropolitan areas-----	44	31	23	2	853
Small metropolitan areas-----	36	32	30	2	605
Nonmetropolitan areas-----	28	28	39	5	721
Family income:					
Upper-----	44	32	23	1	666
Middle-----	35	30	32	3	732
Lower-----	29	29	38	4	530
Age of homemaker:					
Under 36 years-----	37	31	30	2	719
36 - 50 years-----	41	30	27	2	767
Over 50 years-----	32	31	33	4	677
Family composition:					
No children-----	30	31	36	3	843
Children under 6 only-----	33	32	33	2	297
Children 6-17 only-----	42	31	25	2	650
Children in both age groups----	45	28	24	3	389
Size of household:					
Small-----	28	33	36	3	690
Medium-----	37	31	30	2	831
Large-----	45	27	25	3	658

¹ See footnotes to table 7.

Table 10.--Homemakers who had purchased fresh peaches in the past 12 months:

"What amount of fresh peaches do you usually buy at a time during the season when greatest amount purchased? About how often do you buy peaches in this quantity during that season?"¹

Background characteristics	Peach purchase levels				Cases
	High	Medium	Low	No answer	
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Number</u>
United States total-----	25	41	31	3	2,104
Region:					
Northeast-----	22	47	29	2	566
North Central-----	27	40	31	2	598
South-----	28	39	29	4	639
West-----	21	38	36	5	301
Size of community:					
Large metropolitan areas-----	23	45	30	2	820
Small metropolitan areas-----	25	40	32	3	595
Nonmetropolitan areas-----	28	38	29	5	689
Family income:-----					
Upper-----	25	48	26	1	646
Middle-----	26	39	31	4	693
Lower-----	24	38	35	3	517
Age of homemaker:					
Under 36 years-----	22	39	36	3	675
36 - 50 years-----	27	46	24	3	747
Over 50 years-----	26	39	31	4	665
Family composition:					
No children-----	21	42	34	3	836
Children under 6 only-----	17	39	41	3	283
Children 6-17 only-----	31	42	24	3	619
Children in both age groups----	33	42	23	2	366
Size of household:					
Small-----	18	41	38	3	689
Medium-----	25	42	30	3	792
Large-----	34	41	22	3	623

¹ See footnotes to table 7.

Table 11.--Homemakers who had purchased fresh pears in the past 12 months:
 "What amount of fresh pears do you usually buy at a time during the season
 when greatest amount purchased? About how often do you buy pears in this
 quantity during that season?"¹

Background characteristics	Pear purchase levels				Cases
	High	Medium	Low	No answer	
	Percent	Percent	Percent	Percent	Number
United States total-----	35	28	31	6	1,677
Region:					
Northeast-----	39	29	30	2	518
North Central-----	39	29	28	4	448
South-----	28	27	36	9	462
West-----	36	26	29	9	249
Size of community:					
Large metropolitan areas-----	37	31	29	3	729
Small metropolitan areas-----	34	27	35	4	465
Nonmetropolitan areas-----	35	24	30	11	483
Family income:					
Upper-----	38	31	28	3	551
Middle-----	36	28	31	5	543
Lower-----	34	25	33	8	396
Age of homemaker:					
Under 36 years-----	33	28	35	4	519
36 - 50 years-----	38	30	27	5	608
Over 50 years-----	36	26	31	7	535
Family composition:					
No children-----	32	27	35	6	675
Children under 6 only-----	31	28	37	4	216
Children 6-17 only-----	40	28	25	7	509
Children in both age groups----	39	29	27	5	277
Size of household:					
Small-----	30	26	38	6	548
Medium-----	36	29	30	5	647
Large-----	42	29	24	5	482

¹ See footnotes to table 7.

Table 12.--Homemakers who had purchased fresh plums or prunes in the past 12 months: "What amount of fresh plums or fresh prunes do you usually buy at a time during the season when greatest amount purchased? About how often do you buy plums or fresh prunes in the quantity during that season?"¹

Background characteristics	Plums or fresh prune purchase levels				
	High	Medium	Low	No answer	Cases
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Number</u>
United States total-----	36	36	21	7	1,613
Region:					
Northeast-----	44	35	18	3	524
North Central-----	35	36	22	7	482
South-----	22	39	28	11	363
West-----	39	36	14	11	244
Size of community:					
Large metropolitan areas-----	43	37	15	5	736
Small metropolitan areas-----	31	38	25	6	451
Nonmetropolitan areas-----	28	33	27	12	426
Family income:					
Upper-----	43	34	18	5	556
Middle-----	35	38	20	7	547
Lower-----	28	39	23	10	337
Age of homemaker:					
Under 36 years-----	37	33	24	6	526
36 - 50 years-----	39	37	19	5	593
Over 50 years-----	29	40	21	10	480
Family composition:					
No children-----	28	40	24	8	613
Children under 6 only-----	35	34	26	5	209
Children 6-17 only-----	41	37	15	7	496
Children in both age groups----	42	31	21	6	295
Size of household:					
Small-----	26	40	26	8	497
Medium-----	37	37	20	6	636
Large-----	44	32	17	7	480

¹ See footnotes to table 7.

Table 13.--Homemakers' fresh apple purchase levels of, analyzed by their other fruit purchase levels

Other fresh fruit purchase levels	Apple purchase levels		
	High	Medium	Low
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
Bananas			
High-----	54	30	13
Medium-----	28	41	31
Low-----	17	28	54
Not ascertained-----	1	1	2
Number of cases-----	720	958	542
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
Grapes			
High-----	50	40	14
Medium-----	28	31	34
Low-----	20	27	49
Not ascertained-----	2	2	3
Number of cases-----	680	912	494
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
Peaches			
High-----	43	21	9
Medium-----	38	49	32
Low-----	16	28	56
Not ascertained-----	3	2	3
Number of cases-----	651	892	476
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
Pears			
High-----	49	37	14
Medium-----	25	32	28
Low-----	23	28	50
Not ascertained-----	3	3	8
Number of cases-----	542	733	345
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
Plums, fresh prunes			
High-----	47	38	15
Medium-----	31	39	42
Low-----	17	18	34
Not ascertained-----	5	5	9
Number of cases-----	525	692	338

Table 14.--Homemakers who had purchased fresh fruit in the past 12 months:

"Suppose you were the manager of a store and wanted to get people to buy more of these fresh fruits. What ways can you think of that might get your customers to buy more?"¹

Suggestions	United States total
	<u>Percent</u>
Display high quality fresh fruit-----	46
Have attractive eye-catching displays-----	28
Lower prices-----	24
Have clean counters/fruit-----	13
Run sales/specials-----	12
Advertise-----	11
Put in prominent position-----	7
Display loose fruit-----	6
Display, stack fruit neatly-----	6
Provide recipes-----	5
Give samples of less well known fruit-----	4
Give wide selection/variety-----	4
Stress health-----	4
Prepackage the fruit-----	4
Have tempting, appetizing displays-----	3
Miscellaneous service reasons-----	2
Keep fruit moist-----	1
Sell ripe fruit, no green fruit-----	1
Provide full displays-----	1
Don't allow handling-----	1
Sell bruised/less desirable fruit for less-----	1
All other suggestions-----	6
No suggestions-----	2
Not ascertained-----	4
Number of cases-----	2,415

¹ Percentages add to more than 100 because some respondents gave more than one suggestion.

Table 15.--Homemakers who had purchased fresh fruit in the past 12 months: "What kind of fresh fruit did you buy last?"¹

Background characteristics	Apples	Bananas	Oranges	Grapes	Grapefruit	Tangerines	Pears	All other ²	Cases ³
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Number
United States total-----	61	57	28	20	8	8	7	5	2,410
Region:									
Northeast-----	61	54	32	28	9	12	13	6	624
North Central-----	56	64	25	19	10	8	5	4	707
South-----	66	54	28	16	6	6	4	5	726
West-----	63	53	28	15	8	5	6	9	353
Size of community									
Large metropolitan areas----	68	56	32	20	9	11	11	7	923
Small metropolitan areas----	59	60	26	20	10	7	5	4	659
Nonmetropolitan areas-----	56	55	25	19	6	6	3	5	828
Family income									
Upper-----	68	56	31	21	11	13	10	6	697
Middle-----	58	62	27	19	7	7	5	3	802
Lower-----	60	52	24	20	5	4	5	6	628
Employment of homemaker									
Full time-----	64	52	29	21	8	8	6	5	526
Part time-----	58	60	30	23	7	7	12	6	233
Not employed-----	61	58	27	19	9	8	6	5	1,651
Education of homemaker									
No high school-----	58	56	26	19	6	5	6	4	580
Some high school-----	62	56	26	20	5	8	5	4	513
High school graduate-----	62	59	30	19	8	9	7	5	852
College-----	64	54	28	21	16	10	9	9	458
Age of homemaker									
Under 36 years-----	66	59	29	16	5	9	6	4	783
36 - 50 years-----	62	57	31	21	9	9	7	6	825
Over 50 years-----	56	55	24	22	10	5	7	5	785
Family composition									
No children-----	57	52	25	22	10	6	7	6	985
Children under 6 only-----	62	61	30	17	5	6	5	3	318
Children 6-17 only-----	63	59	28	20	8	10	8	6	689
Children in both age groups-	69	61	33	15	8	12	5	4	418
Size of household									
Small-----	56	51	24	21	10	6	7	5	816
Medium-----	62	59	29	20	8	9	7	6	892
Large-----	66	61	31	18	7	10	6	5	702

¹ Percentages add to more than 100 because some homemakers bought more than one fruit last time.

² None of these fruits was bought by more than 1 percent of the homemakers.

³ 5 respondents could not recall what fruit they had purchased last time.

Table 16.--Homemakers who had purchased fresh fruit in the past 12 months: "What kind of fresh fruit did you buy last? Which one of these statements comes closest to describing how you decided to buy (FRUIT)?"

How decision was made to buy specific fruit	All fruits	Fresh fruits purchased last time							
		Apples	Oranges	Bananas	Grapefruit	Pears	Grapes	Tangerines	All other fruits
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Planned to buy this fruit before entering the store--	62	68	67	63	61	51	46	40	52
Planned to buy some kind of fruit, but decided on this kind in the store-----	24	18	22	23	27	41	37	46	27
Didn't plan to buy fruit ahead of time; decided to buy this kind in the store-	12	12	9	13	9	7	14	11	19
Not ascertained-----	2	2	2	1	3	1	3	3	2
Number of cases-----	4,685	1,479	675	1,368	199	165	474	197	128

Table 17.--Homemakers who had purchased fresh fruit in the past 12 months: Summary of when decision to purchase specific fruits bought last time was made

When decision was made	United States total	Northeast	North Central	South	West
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
Planned to buy all fruits purchased before entering the store-----	53	60	47	53	50
Planned to buy some of the fruits purchased, and bought others on impulse-----	16	16	20	14	15
Planned to buy some kind of fruit, but decided on each kind in the store-----	14	13	14	13	17
Didn't plan to buy any fruit ahead of time-----	15	9	18	17	16
Not ascertained-----	2	2	1	3	2
Number of cases-----	2,410	624	707	726	353

Table 18.--Homemakers who had purchased fresh fruit in the past 12 months: "What kind of fresh fruit did you buy last? Did you buy (FRUIT) loose or already in some kind of bag or container?"

Total fruits	United States total ¹	Loose	Packaged	No answer	Cases
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Number</u>
Apples-----	61	59	40	1	1,479
Bananas-----	57	89	9	2	1,368
Oranges-----	28	64	35	1	675
Grapes-----	20	77	21	2	474
Grapefruit-----	8	59	37	4	199
Tangerines-----	8	78	21	1	197
Pears-----	7	79	21	(*)	165
All other fruits-----	5	72	20	8	128

¹ United States total adds to more than 100 because some homemakers bought more than one fruit the last time.

*Less than 1 percent.

Table 19.--Percentage distribution of how fruit was purchased by homemakers "last time"

How fruit was bought "last time"	United States total	Northeast	North Central	South	West
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
Loose-----	61	53	51	66	82
Packaged-----	16	21	19	15	6
Some loose and some packaged-----	21	25	27	17	10
Not ascertained-----	2	1	3	2	2
Number of cases-----	2,410	624	707	726	353

Table 20.--Homemakers who had purchased fresh fruit in the past 12 months:
 "In general, would you like to buy fresh fruit that is already in some
 kind of bag or container, or would you rather buy it loose?"

Background characteristics	Loose	Packaged	No preference	Cases
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Number</u>
United States total-----	75	16	9	2,415
Region:				
Northeast-----	70	18	12	625
North Central-----	72	20	8	709
South-----	74	16	10	728
West-----	89	4	7	353
Size of community:				
Large metropolitan areas----	76	14	10	923
Small metropolitan areas----	77	14	9	663
Nonmetropolitan areas-----	70	20	10	829
Family income:				
Upper-----	78	13	9	697
Middle-----	75	16	9	804
Lower-----	70	20	10	630
Employment of homemaker:				
Full time-----	75	15	10	529
Part time-----	72	18	10	233
Not employed-----	75	16	9	1,653
Education of homemaker:				
No high school-----	70	18	12	582
Some high school-----	75	15	10	514
High school graduate-----	74	17	9	853
College-----	79	14	7	459
Age of homemaker:				
Under 16 years-----	73	19	8	785
36-50 years-----	75	15	10	825
Over 50 years-----	76	14	10	788
Family composition:				
No children-----	77	13	10	990
Children under 6 only-----	70	22	8	318
Children 6-17 only-----	76	15	9	689
Children in both age groups--	70	20	10	418
Size of household:				
Small-----	79	12	9	819
Medium-----	75	15	10	894
Large-----	69	21	10	702

Table 21.--Homemakers who had purchased fresh fruit in the past 12 months and preferred to buy it loose: "Are there any fresh fruits you don't like to buy this way? Which ones?"¹

Preferences	Homemakers who prefer to buy fresh fruit loose
	<u>Percent</u>
PREFER TO BUY ALL KINDS LOOSE-----	89
PREFER TO BUY SOME KINDS PACKAGED-----	10
Apples-----	2
Grapes-----	2
Oranges-----	2
Strawberries-----	2
Bananas-----	1
Cherries-----	1
Grapefruit-----	1
All other fresh fruits-----	2
NOT ASCERTAINED-----	1
Number of cases-----	1,800

¹ Percentages add to more than the group total because some respondents named more than 1 fruit.

Table 22.--Homemakers who had purchased fresh fruit in the past 12 months and preferred to buy fresh fruit packaged: "Are there any fresh fruits you don't like to buy this way? Which ones?"¹

Preferences	Homemakers who prefer to buy fresh fruit packaged
	<u>Percent</u>
PREFER TO BUY ALL KINDS PACKAGED-----	58
PREFER TO BUY SOME KINDS LOOSE-----	40
Bananas-----	15
Grapes-----	12
Peaches-----	8
Oranges-----	5
Pears-----	3
Apples-----	2
Grapefruit-----	2
Plums, fresh prunes-----	2
Cherries-----	1
Strawberries-----	1
All other fresh fruits-----	4
NOT ASCERTAINED-----	2
Number of cases-----	385

¹ Percentages add to more than their group total because some respondents named more than 1 fruit.

Table 23.--Homemakers who had purchased fresh fruit in the past 12 months: "What are the advantages of buying fresh fruit loose?"¹

Advantages of buying fresh fruit loose	United States total	Homemakers who prefer to buy loose fruit	Homemakers who prefer to buy packaged fruit	Homemakers who have no preference
	Percent	Percent	Percent	Percent
You get no spoiled or bruished fruit-----	54	59	37	39
You can get the number you want-----	31	33	28	23
You can choose the ones you want-----	29	30	25	35
You can get the size you want-----	13	14	7	10
You can test for firmness and ripeness-----	8	8	6	5
It is fresher-----	8	10	2	3
It is less expensive-----	7	6	11	9
You can get the degree of ripeness you want-----	6	6	5	4
It is more attractive-----	1	2	1	1
You can see the color-----	1	1	(*)	1
All other answers-----	1	1	1	1
There are no advantages-----	4	--	16	7
Not ascertained-----	1	(*)	2	5
Number of cases-----	2,415	1,800	385	230

¹ Percentages add to more than 100 because some respondents gave more than 1 advantage.

* Less than 1 percent.

Table 24.--Homemakers who had purchased fresh fruit in the past 12 months: "What are the advantages of buying fresh fruit in some kind of bag or container?"¹

Advantages of buying fresh fruit packaged	United States total	Homemakers who prefer to buy packaged fruit	Homemakers who prefer to buy loose fruit	Homemakers who have no preference
	Percent	Percent	Percent	Percent
It's time saving-----	28	42	24	41
It is not handled-----	14	32	9	17
It is more sanitary-----	10	25	7	9
It is easy to pick up-----	9	14	8	16
It is less expensive-----	9	11	9	13
It is easy to carry-----	6	8	6	6
It is easy to store-----	5	9	4	6
It is protected-----	4	9	3	6
It is more convenient (general)-----	4	5	4	5
It is already priced-----	3	8	2	3
It has a clear transparent bag-----	3	7	1	5
It looks inviting-----	2	6	1	2
It keeps fresher-----	2	6	1	1
Better choice and quality-----	1	3	1	1
It is the right amount for small family-----	1	2	1	2
It has a reusable container-----	1	1	(*)	--
All other answers-----	1	1	(*)	(*)
There are no advantages-----	36	4	46	18
Not ascertained-----	1	1	1	4
Number of cases-----	2,415	385	1,800	230

¹ Percentages may add to more than 100 because some respondents gave more than 1 advantage.

*Less than 1 percent.

Table 25.--Homemakers who had purchased fresh fruit in the past 12 months: "Here is a list of statements which some people have made about fresh fruits. Which of these statements do you feel are especially true about (each fruit)?"¹

Statements selected	Apples	Bananas	Grapes	Peaches	Pears	Plums or fresh prunes
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
<u>Positive</u>						
Good for health-----	93	75	70	73	68	66
Good for snacks or packed lunches-----	91	79	64	58	61	51
Can be used many ways-----	86	63	26	62	30	20
Reasonably priced when in season-----	69	56	48	53	34	35
Can buy ready to use without further ripening-----	67	48	59	41	34	38
Good laxative-----	43	12	22	23	22	44
Low in calories-----	38	15	27	22	24	20
<u>Negative</u>						
Often bruised, blemished-----	18	42	20	45	26	15
Hard to digest-----	8	11	3	2	7	3
Spoils easily-----	5	56	26	44	25	20
Hard to find good quality even in season-----	4	5	5	10	10	5
Hard to find variety liked even in season-----	4	1	5	7	9	7
Difficult to tell when ripe-----	3	6	5	18	26	16
Family does not like them-----	2	3	4	5	13	15
Messy to eat-----	1	5	11	43	15	21
Not ascertained-----	(*)	(*)	1	1	2	2
Number of cases-----	2,415	2,415	2,415	2,415	2,415	2,415

¹ Percentages add to more than 100 because some respondents selected more than one statement.

* Less than 1 percent.

Table 26.--Homemakers who had purchased fresh fruit in the past 12 months and who selected positive statements, by their fresh fruit purchase levels¹

Fruits and levels of purchase	Positive statements							Cases ²
	Good for health.	Good for snacks and packed lunches	Can be used many ways	Reasonably priced when in season	Can buy ready to use without further ripening	Good laxative	Low in calories	
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Number
APPLES - TOTAL-----								
High-----	93	91	86	69	67	43	38	2,415
Medium-----	95	94	87	73	69	48	41	728
Low-----	92	92	87	69	68	43	39	975
None-----	93	89	83	66	66	38	33	564
	82	80	79	46	56	46	42	108
BANANAS - TOTAL-----								
High-----	75	79	63	56	48	12	15	2,415
Medium-----	79	84	67	60	48	14	18	769
Low-----	76	81	66	56	48	13	16	801
None-----	73	75	57	56	50	12	13	732
	39	44	28	20	27	5	9	64
GRAPES - TOTAL-----								
High-----	70	64	26	48	59	22	27	2,415
Medium-----	73	70	27	57	61	25	27	795
Low-----	74	68	28	52	63	22	28	665
None-----	68	62	25	41	59	20	26	658
	57	41	24	25	43	17	21	236
PEACHES - TOTAL-----								
High-----	73	58	62	53	41	23	22	2,415
Medium-----	78	66	73	66	46	30	24	532
Low-----	75	61	63	57	41	22	23	868
None-----	72	56	55	47	37	19	18	638
	61	44	50	35	36	22	21	311
PEARS - TOTAL-----								
High-----	68	61	30	34	34	22	24	2,415
Medium-----	75	72	38	45	36	29	26	594
Low-----	74	68	29	37	36	22	28	469
None-----	67	61	23	30	34	20	22	517
	58	49	29	24	30	20	20	738
PLUMS, FRESH PRUNES - TOTAL-----								
High-----	66	51	20	35	38	44	20	2,415
Medium-----	75	68	24	50	41	45	21	575
Low-----	69	61	18	37	41	47	23	587
None-----	71	52	18	31	42	43	18	336
	56	32	19	22	33	41	17	802

¹ Percentages add to more than 100 because respondents selected more than one statement.

² Purchase levels do not add up to the totals because some respondents could not be grouped.

Table 27.--Homemakers who had purchased fresh fruit in the past 12 months and who selected negative statements by their levels of purchase¹

Fruits and levels of purchase	Negative statements								Messy to eat	Cases ²
	Often bruised, blemished	Hard to digest	Spoil easily	Hard to find good quality even in season	Hard to find variety liked even in season	Difficult to tell when ripe	Family does not like them	Percent		
APPLIES - TOTAL-----	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Number	
High-----	18	8	5	4	4	3	2	1	2,415	
Medium-----	20	7	5	4	4	4	1	2	728	
Low-----	16	7	3	3	4	2	1	1	975	
None-----	18	10	6	5	6	4	2	1	564	
	25	13	11	6	8	6	11	1	108	
BANANAS - TOTAL-----										
High-----	42	11	56	5	1	6	3	5	2,415	
Medium-----	41	9	56	5	1	6	1	6	769	
Low-----	42	11	56	4	1	6	1	4	801	
None-----	42	11	57	5	2	6	5	5	732	
	34	41	55	5	2	6	36	5	64	
GRAPES - TOTAL-----										
High-----	20	3	26	5	5	5	4	11	2,415	
Medium-----	20	2	24	4	6	5	1	10	795	
Low-----	18	3	26	4	3	5	2	11	665	
None-----	23	4	26	6	7	6	4	12	658	
	14	7	28	3	3	4	22	17	236	
PEACHES - TOTAL-----										
High-----	45	2	44	10	7	18	5	43	2,415	
Medium-----	46	3	46	7	7	14	1	45	532	
Low-----	45	1	46	10	8	19	2	41	868	
None-----	45	3	41	11	6	20	4	45	638	
	40	5	40	10	8	16	19	42	311	
PEARS - TOTAL-----										
High-----	26	7	25	10	9	26	13	15	2,415	
Medium-----	28	5	29	9	10	26	4	14	594	
Low-----	28	4	25	8	7	26	5	14	469	
None-----	27	6	24	13	10	29	5	17	517	
	23	11	21	10	8	24	30	15	738	
PLUMS, FRESH PRUNES - TOTAL-----										
High-----	15	3	20	5	7	16	15	21	2,415	
Medium-----	20	1	26	5	8	18	3	20	575	
Low-----	17	3	19	5	9	22	6	23	587	
None-----	11	3	19	6	6	20	10	28	336	
	12	5	17	5	5	10	34	18	802	

¹ Percentages add to more than 100 because respondents selected more than one statement.

² Purchase levels do not add up to the totals because some respondents could not be grouped.

Table 28.--Homemakers who had purchased fresh fruit in the past 12 months: "How would you rate the importance of each of these factors on this card when you are considering which fresh fruits to purchase? For example, would you say "can be used many ways" is very important, fairly important, or not too important to you?"¹

Statements	Ratings			Cases
	Very important	Fairly important	Not too important	
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Number</u>
<u>Positive</u>				
Good for health-----	88	8	3	2,415
Reasonably priced when in season-----	79	14	7	2,415
Good for snacks or packed lunches-----	66	19	14	2,415
Can buy ready to use without further ripening-----	45	31	23	2,415
Can be used many ways-----	46	23	30	2,415
Good laxative-----	39	24	36	2,415
Low in calories-----	31	20	47	2,415
<u>Negative</u>				
Often bruised, blemished-----	78	15	6	2,415
Family does not like them-----	75	8	15	2,415
Spoils easily-----	69	17	13	2,415
Hard to find good quality even in season-----	46	24	28	2,415
Hard to digest-----	47	20	32	2,415
Difficult to tell when ripe-----	37	27	35	2,415
Hard to find variety liked even in season-----	25	30	43	2,415
Messy to eat-----	15	22	62	2,415

¹ Percentages sometimes add to less than 100 because some homemakers did not rate the statements.

Table 29.--Homemakers who had used fresh fruit in the past 12 months: "Is there anything you don't like so well about using fresh (FRUIT)?"¹

Dislikes	Apples	Apricots	Cherries	Grapes	Nectarines	Peaches	Pears	Pineapple	Plums or fresh prunes
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
No dislikes-----	89	52	66	84	60	78	83	37	80
Hard to prepare-----	4	1	3	1	(*)	4	1	39	1
Too expensive-----	1	4	6	1	4	1	1	6	1
Texture reasons-----	1	4	(*)	(*)	1	2	5	2	1
Ripening and spoilage problems-----	1	2	1	2	1	4	4	2	2
Health reasons-----	1	2	1	1	1	2	1	4	2
Dislike taste (general)-----	(*)	7	1	(*)	3	(*)	1	1	2
I/we don't like them-----	(*)	6	2	(*)	2	(*)	2	1	2
Tart; too sour; bitter-----	(*)	5	4	1	2	1	(*)	5	4
Nonavailability-----	(*)	5	1	(*)	3	1	(*)	1	1
Other taste reasons-----	(*)	4	1	(*)	2	(*)	1	2	(*)
Prefer other fruits-----	(*)	3	1	(*)	4	(*)	(*)	1	1
Prefer canned or dried forms-----	(*)	2	2	(*)	(*)	(*)	(*)	4	1
Dislike skin, fuzz-----	(*)	2	--	(*)	(*)	6	(*)	(*)	(*)
Messy to eat-----	(*)	1	2	1	1	4	1	(*)	2
Canned or dried fruit tastes better-----	(*)	1	(*)	--	(*)	--	(*)	2	(*)
Dislike pits, seeds, core-----	(*)	(*)	11	9	(*)	1	(*)	(*)	1
Not familiar with fruit-----	--	4	(*)	(*)	16	(*)	(*)	3	(*)
All other dislikes-----	(*)	1	1	(*)	(*)	(*)	(*)	1	(*)
Not ascertained-----	(*)	1	1	(*)	1	1	1	1	1
Number of cases-----	2,415	2,415	2,415	2,415	2,415	2,415	2,415	2,415	2,415

¹ Percentages may add to more than 100 because some respondents gave more than one dislike.

* Less than 1 percent.

Table 30.--Homemakers who had used fresh fruit in the past 12 months and who indicated that they had no dislike for the specific fruits¹

Background characteristics	Apples	Apricots	Cherries	Grapes	Nectarines	Peaches	Pears	Pineapple	Plums or fresh prunes	Cases
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Number
United States total-----	89	52	66	84	60	78	83	37	80	2,415
Region:										
Northeast-----	92	51	78	87	66	80	86	44	84	625
North Central-----	87	47	60	77	52	80	77	30	77	709
South-----	92	51	60	87	58	85	87	37	80	728
West-----	86	68	70	83	67	77	79	35	80	353
Size of community:										
Large metropolitan areas-----	88	51	71	84	64	78	85	41	83	923
Small metropolitan areas-----	87	47	60	80	57	72	78	28	75	663
Nonmetropolitan areas-----	93	58	65	86	57	83	84	39	82	829
Family income:										
Upper-----	90	53	68	80	66	74	81	34	82	697
Middle-----	89	49	66	86	58	78	82	36	81	804
Lower-----	90	52	64	85	53	83	83	39	77	630
Education of homemaker:										
No high school-----	91	55	66	89	55	86	85	42	82	582
Some high school-----	91	48	62	87	54	81	83	32	78	514
High school graduate-----	89	52	68	82	63	78	84	36	81	853
College-----	86	53	65	77	64	68	77	37	78	459
Age of homemaker:										
Under 36 years-----	88	46	62	83	57	72	81	35	78	785
36-50 years-----	89	51	66	82	62	76	81	34	81	825
Over 50 years-----	91	60	70	86	60	87	86	42	81	788
Family composition:										
No children-----	91	56	68	85	59	84	84	40	79	990
Children under 6 only-----	86	47	61	81	55	72	80	36	78	318
Children 6 - 17 only-----	89	52	66	83	61	76	83	34	82	689
Children in both age groups----	89	48	64	83	62	74	82	33	80	418
Size of household:										
Small-----	90	54	68	85	57	83	83	40	79	819
Medium-----	88	54	65	82	62	76	82	34	81	894
Large-----	91	48	65	84	59	76	83	36	81	702

¹ Percentages add to more than 100 because some respondents named more than one fruit.

Table 31.--Negative attitudes toward use and/or purchase of various fresh fruits mentioned by 5 percent or more of the homemakers who had purchased fresh fruit in the past 12 months (Q. 1 and 23)¹

Negative attitudes toward use and/or purchase	Apples			Apricots			Cherries			Grapes			Nectarines		
	Total	Pur-chas-ers	Non-pur-chasers	Total	Pur-chas-ers	Non-pur-chasers	Total	Pur-chas-ers	Non-pur-chasers	Total	Pur-chas-ers	Non-pur-chasers	Total	Pur-chas-ers	Non-pur-chasers
	Percent			Percent			Percent			Percent			Percent		
Have no dislikes-----	89	90	71	52	82	44	66	81	52	84	85	67	80	87	42
Hard to prepare-----	--	--	--	--	--	--	5	--	9	--	--	--	--	--	--
Have own trees, friends or relatives supply them-----	--	--	62	--	--	5	5	--	11	--	--	27	--	--	--
Health reasons-----	--	--	18	--	--	--	--	--	--	--	--	17	--	--	--
Texture reasons-----	--	--	6	5	--	6	--	--	--	--	--	--	--	--	--
Too expensive-----	--	--	--	8	--	10	14	--	24	--	--	15	8	--	12
I/we don't like them-----	--	--	8	14	--	18	6	--	12	--	--	12	6	--	10
Dislike taste - (general)-----	--	--	--	11	--	14	--	--	5	--	--	--	5	--	8
Tart; too sour; bitter-----	--	--	--	7	--	8	5	--	8	--	--	--	--	--	--
Prefer canned/dried form-----	--	--	--	6	--	7	5	--	10	--	--	--	--	--	--
Nonavailability-----	--	--	--	18	--	23	7	--	13	--	--	--	11	--	17
Dislike pits, seeds, core-----	--	--	--	--	--	--	12	9	14	9	9	9	--	--	--
Prefer other fruits-----	--	--	6	8	--	10	5	--	10	--	--	13	9	--	14
Not familiar with fruit-----	--	--	--	6	--	7	--	--	--	--	--	--	24	--	39
Dislike skin, fuzz-----	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other taste reasons-----	--	--	--	6	--	8	--	--	--	--	--	--	--	--	--
Ripening and spoilage problems-----	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Canned or dried fruit tastes better-----	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Number of cases-----	2,415	2,307	108	2,415	529	1,886	2,415	1,168	1,247	2,415	2,179	236	2,415	944	1,471

Negative attitudes toward use and/or purchase	Peaches			Pears			Pineapple			Plums, fresh prunes		
	Total	Pur-chas-ers	Non-pur-chasers	Total	Pur-chas-ers	Non-pur-chasers	Total	Pur-chas-ers	Non-pur-chasers	Total	Pur-chas-ers	Non-pur-chasers
	Percent			Percent			Percent			Percent		
Have no dislikes-----	78	80	64	83	89	69	37	64	25	80	88	63
Hard to prepare-----	--	--	--	--	--	--	46	26	54	--	--	--
Have own trees, friends or relatives supply them-----	--	--	32	11	--	36	--	--	--	8	--	23
Health reasons-----	--	--	12	--	--	6	6	--	8	--	--	8
Texture reasons-----	--	--	5	6	--	12	--	--	--	--	--	--
Too expensive-----	--	--	14	--	--	10	9	--	12	--	--	9
I/we don't like them-----	--	--	6	--	--	14	--	--	6	6	--	17
Dislike taste - (general)-----	--	--	--	--	--	--	--	--	--	--	--	8
Tart; too sour; bitter-----	--	--	--	--	--	--	8	--	11	5	--	12
Prefer canned/dried form-----	--	--	6	--	--	5	11	--	16	--	--	6
Nonavailability-----	--	--	6	--	--	5	6	--	8	--	--	8
Dislike pits, seeds, core-----	--	--	--	--	--	--	--	--	--	--	--	--
Prefer other fruits-----	--	--	7	--	--	7	--	--	5	--	--	12
Not familiar with fruit-----	--	--	--	--	--	--	5	--	7	--	--	--
Dislike skin, fuzz-----	6	6	7	--	--	--	--	--	--	--	--	--
Other taste reasons-----	--	--	--	--	--	--	--	--	--	--	--	--
Ripening and spoilage problems-----	5	--	7	5	5	7	--	--	--	--	--	--
Canned or dried fruit tastes better-----	--	--	--	--	--	--	5	--	6	--	--	--
Number of cases-----	2,415	2,104	311	2,415	1,677	738	2,415	712	1,703	2,415	1,613	802

¹ This table represents a summary of reasons for nonuse of the various fruits and homemakers' dislikes of the specific fruits.

Table 32.--Homemakers who had purchased fresh apples in the past 12 months: "Where do you buy fresh apples most often to use at home? Where else do you buy them occasionally?"¹

Background characteristics	Supermarket			Grocery store			Roadside stand			Orchard, farm			Farmer's market			Peddler			All other places			Cases
	Total	Most often	Occasionally	Total	Most often	Occasionally	Total	Most often	Occasionally	Total	Most often	Occasionally	Total	Most often	Occasionally	Total	Most often	Occasionally	Total	Most often	Occasionally	
	Percent			Percent			Percent			Percent			Percent			Percent			Percent			Number
United States total-----	73	57	16	36	23	13	29	7	22	11	6	5	13	5	8	10	2	8	5	3	2	2,307
Region:																						
Northeast-----	80	57	23	21	13	8	34	10	24	13	8	7	16	8	3	7	4	5	7	4	3	596
North Central-----	67	51	16	38	25	13	29	6	23	20	12	3	14	7	10	7	2	5	5	2	3	675
South-----	71	58	13	43	29	14	30	4	16	5	1	7	11	3	3	17	4	13	4	3	1	715
West-----	75	63	12	42	24	18	37	7	30	3	2	1	7	3	4	7	1	6	4	2	2	321
Size of community:																						
Large metropolitan areas--	86	71	15	24	14	10	31	6	15	6	3	3	13	4	9	9	2	7	7	3	4	891
Small metropolitan areas--	75	58	17	28	19	9	33	7	20	11	8	9	18	7	12	10	2	8	3	1	2	640
Nonmetropolitan areas----	55	39	16	55	37	18	22	7	15	18	9	9	3	3	4	12	3	4	5	3	2	776
Family income:																						
Upper-----	80	63	17	25	16	9	36	7	29	13	7	6	10	4	6	6	2	4	7	4	3	680
Middle-----	73	55	18	34	22	12	31	7	24	13	7	6	17	4	11	10	2	8	5	3	2	755
Lower-----	64	50	14	49	31	18	19	5	14	8	5	3	10	3	7	16	4	12	4	2	2	596
Education of homemaker:																						
No high school-----	65	50	15	43	30	13	21	5	16	8	4	3	13	5	8	19	6	13	4	2	2	540
Some high school-----	73	53	20	42	27	15	27	7	20	8	4	4	13	4	9	11	3	8	4	2	2	498
High school graduate-----	73	58	15	32	20	12	30	6	24	15	8	7	13	5	2	7	2	5	6	3	3	818
College-----	79	63	16	27	16	11	37	9	28	11	6	5	13	5	3	5	1	4	5	4	1	444
Age of homemaker:																						
Under 36 years-----	76	60	16	34	22	12	35	7	28	10	5	5	12	4	8	9	2	7	5	2	3	765
36 - 50 years-----	73	55	18	34	21	13	32	4	23	12	7	5	12	4	8	11	3	8	6	4	2	797
Over 50 years-----	68	54	14	40	27	13	14	4	15	11	6	5	14	5	9	11	3	8	5	2	3	730
Family composition:																						
No children-----	71	56	15	37	26	11	23	6	17	10	5	5	11	4	7	11	3	8	5	2	3	918
Children under 6 only-----	76	63	13	34	21	13	33	4	24	8	3	5	13	5	8	8	1	7	7	4	3	310
Children 6 - 17 only-----	74	55	19	35	20	15	31	8	23	13	7	6	16	6	10	11	3	8	5	3	2	672
Children in both age groups-----	71	53	18	36	24	12	35	7	27	15	9	6	10	3	7	10	3	7	5	3	2	407
Size of household:																						
Small-----	72	56	16	37	26	11	21	5	16	10	5	5	11	4	7	10	3	7	5	2	3	753
Medium-----	74	59	15	33	21	12	31	7	24	11	5	6	13	5	8	10	2	8	7	4	3	869
Large-----	72	54	18	36	22	14	35	8	27	13	9	4	14	4	10	11	3	8	4	2	2	685
Apple purchase levels:																						
High-----	69	48	21	34	20	14	33	9	24	17	12	5	16	7	9	12	4	8	5	3	2	728
Medium-----	75	60	15	36	23	13	29	6	23	10	4	6	12	4	8	10	2	8	5	2	3	975
Low-----	75	63	12	36	25	11	23	4	19	7	3	4	10	3	7	9	2	7	6	3	3	564

¹ Percentages add to more than 100 because some respondents named more than one point of purchase.

Table 33.--Homemakers who had purchased fresh apples in the past 12 months: "During the fall and winter do you use fresh apples at least once a week or do you use them less often? What about the spring? What about the summer?"

Background characteristics	Fall and winter		Spring		Summer		Cases
	At least once a week	Less than once a week	At least once a week	Less than once a week	At least once a week	Less than once a week	
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Number</u>
United States total-----	86	14	65	35	62	38	2,307
Region:							
Northeast-----	90	10	71	29	64	36	596
North Central-----	83	17	59	41	58	42	675
South-----	85	15	68	32	65	35	715
West-----	85	15	63	37	59	41	321
Size of community:							
Large metropolitan areas-----	87	13	72	28	68	32	891
Small metropolitan areas-----	85	15	61	39	58	42	640
Nonmetropolitan areas-----	85	15	61	39	58	42	776
Family income:							
Upper-----	90	10	70	30	59	41	680
Middle-----	85	15	63	37	64	36	755
Lower-----	83	17	65	35	64	36	596
Education of homemaker:							
No high school-----	84	16	67	33	66	34	540
Some high school-----	84	16	63	37	63	37	498
High school graduate-----	88	12	68	32	63	37	818
College-----	85	15	61	39	53	47	444
Age of homemaker:							
Under 36 years-----	83	17	64	36	63	37	765
36 - 50 years-----	89	11	69	31	63	37	797
Over 50 years-----	85	15	62	38	59	41	730
Family composition:							
No children-----	83	17	61	39	59	41	918
Children under 6 only-----	79	21	64	36	64	36	310
Children 6-17 only-----	89	11	68	32	63	37	672
Children in both age groups-----	93	7	71	29	66	34	407
Size of household:							
Small-----	82	18	60	40	58	42	753
Medium-----	86	14	66	34	63	37	869
Large-----	90	10	69	31	64	36	685
Apple purchase levels:							
High-----	95	5	75	25	69	31	728
Medium-----	91	9	69	31	64	36	975
Low-----	66	34	46	54	48	52	564

Table 34.--Homemakers who had purchased fresh apples in the past 12 months and had used them less often than once a week during certain seasons: "Why don't you use them more often during (SEASON)?"¹

Reasons for infrequent use	Fall and winter	Spring	Summer
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
Too expensive-----	16	20	16
Like a variety of fruits-----	14	10	5
Fewer people at home-----	13	6	5
Have a taste for them only at certain times-----	10	4	3
They have limited use-----	8	4	4
Health reasons-----	7	3	2
I/we don't like them-----	6	3	2
Not as good at this time of year-----	5	25	20
Use, prefer other processed fruit-----	5	2	1
Prefer other fruits/juices-----	3	1	2
Don't shop that often in that season-----	3	1	1
So many other fruits available-----	2	18	35
Less variety available-----	2	13	14
Prefer other foods-----	2	2	2
Dislike taste-----	1	4	3
Poor taste (general)-----	1	4	3
Don't bake/pack lunches as much-----	1	(*)	1
Not in season (general)-----	--	3	2
All other reasons-----	2	1	1
Not ascertained-----	7	3	3
Number of cases-----	327	799	881

¹ Percentages add to more than 100 because some respondents gave more than one reason.

*Less than 1 percent.

Table 35.--Homemakers who had purchased fresh apples in the past 12 months: The proportions who use fresh apples less often than once a week by seasons and selected reasons

Background characteristics	Spring				Cases	Summer			Cases	Fall & winter ¹	
	Not as good at this time of year	Too expensive	So many other fruits available	Like a variety of fruits		Too expensive	So many other fruits available	Less variety available		Too expensive	Cases
United States total----	25	20	18	10	799	16	35	14	881	16	327
Region:											
Northeast-----	27	19	20	5	173	16	34	16	217	--	--
North Central-----	24	20	17	11	277	15	31	13	287	--	--
South-----	26	19	15	7	231	17	39	16	247	--	--
West-----	21	21	20	17	118	20	41	6	130	--	--
Education of homemaker:											
No high school-----	21	25	11	6	178	21	30	12	184	--	--
Some high school-----	21	21	16	10	182	20	26	13	184	--	--
High school graduate-----	28	16	19	14	260	13	38	14	301	--	--
College-----	27	20	23	6	175	15	45	16	208	--	--
Family income:											
Upper-----	35	21	21	10	201	16	42	19	275	--	--
Middle-----	20	16	19	11	277	12	35	14	271	--	--
Lower-----	21	28	11	10	210	27	27	9	217	--	--
Family composition:											
No children-----	23	14	16	8	353	11	31	14	380	--	--
Children under 6 only-----	21	13	21	12	113	15	31	17	113	--	--
Children 6-17 only-----	28	27	16	12	216	21	41	12	251	--	--
Children in both age groups-----	27	31	20	9	117	25	41	13	137	--	--

¹ Number for fall and winter was too small for detailed analysis.

Table 36.--Homemakers who purchased fresh apples in the past 12 months: "During the past year, in which of these ways have you used raw apples in your home? Eaten out-of-hand? Salads? Fruit cups?"¹

Background characteristics	For eating out of hand	In salads	In fruit cups	In other ways ²	Have not used raw apples	Cases
	Percent	Percent	Percent	Percent	Percent	Number
United States total-----	97	63	31	4	1	2,307
Region:						
Northeast-----	98	43	38	3	1	596
North Central-----	97	66	24	6	1	675
South-----	98	73	32	3	(*)	715
West-----	96	69	31	2	2	321

¹ Percentages add to more than 100 because some respondents mentioned more than one way of using raw apples.

² Includes use in jello, use in taffy or candy apples, and other purposes.

*Less than 1 percent.

Table 37.--Homemakers who had used fresh apples raw in the past 12 months: "When are apples eaten raw by your family?"¹

Background characteristics	Daytime snacks	Evening snacks	Packed lunches	Meals at home	No particular time	Cases
	Percent	Percent	Percent	Percent	Percent	Number
United States total-----	77	77	39	24	2	2,289
Region:						
Northeast-----	80	80	39	15	1	590
North Central-----	71	80	43	21	1	669
South-----	81	75	32	32	--	714
West-----	72	70	49	29	8	316
Size of community:						
Large metropolitan areas-----	75	76	42	20	3	880
Small metropolitan areas-----	77	81	45	27	2	639
Nonmetropolitan areas-----	78	75	31	26	(*)	770
Family income:						
Upper-----	78	78	44	23	2	677
Middle-----	74	78	47	21	2	750
Lower-----	81	76	27	30	1	591
Age of homemaker:						
Under 36 years-----	83	75	45	19	2	764
36 - 50 years-----	75	78	47	23	2	797
Over 50 years-----	72	77	26	30	2	713
Family composition:						
No children-----	69	78	29	29	1	902
Children under 6 only-----	87	73	41	22	2	308
Children 6 - 17 only-----	77	81	49	22	2	672
Children in both age groups-----	86	71	46	18	2	407
Size of household:						
Small-----	70	78	28	30	1	739
Medium-----	77	79	44	21	2	866
Large-----	84	73	46	21	2	684
Apple purchase levels:						
High-----	80	79	47	25	2	725
Medium-----	76	75	39	25	2	969
Low-----	74	77	31	22	1	556

¹ Percentages add to more than 100 because some respondents mentioned more than one occasion.

*Less than 1 percent.

Table 38.--Homemakers who had used fresh apples raw in the past 12 months:
 "Now will you look at this card and tell me which of these qualities do
 you look for when choosing fresh apples for eating raw?"¹

Qualities	United States total	Northeast	North Central	South	West
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
Appearance:					
No blemishes-----	71	66	78	65	75
No bruises-----	62	54	70	57	70
Smooth skin-----	33	32	36	31	30
Shiny-----	26	25	25	27	27
Soft skin-----	9	6	10	12	7
Size and shape:					
Medium-----	65	64	68	65	60
Uniform shape-----	14	13	15	12	17
Large-----	13	11	11	17	13
All same size-----	6	7	5	6	8
Small-----	6	5	5	6	11
Color:					
Deep red-----	43	43	40	45	47
Bright red-----	41	40	44	39	40
Yellow-----	19	11	24	20	18
Part red, part green-----	14	18	13	11	12
Green-----	5	4	3	2	15
Firmness:					
Firm but not hard-----	62	67	63	58	60
Hard-----	24	26	24	19	30
Soft-----	9	4	9	15	3
Taste:					
Sweet-----	50	45	55	52	48
Tart-----	21	14	25	22	22
Juiciness:					
Juicy-----	87	84	88	88	90
Dry-----	2	2	2	2	(*)
Variety or kind of apple-----	27	25	35	22	27
Number of cases-----	2,289	590	669	714	316

¹ Percentages add to more than 100 because some homemakers selected more than one quality.

*Less than 1 percent.

Table 39.--Homemakers who had used fresh apples raw in the past 12 months: "Which variety or kind of apples do you prefer for eating raw?"¹

Varieties preferred	United States total	Northeast	North Central	South	West
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
Delicious-----	58	44	57	62	72
McIntosh-----	23	60	16	5	9
Jonathan-----	17	1	40	5	26
Winesap, Stayman Winesap-----	16	11	13	23	14
Rome Beauty-----	3	1	2	4	7
Grimes Golden-----	3	1	5	2	2
Cortland-----	2	7	(*)	(*)	--
York Imperial-----	1	1	(*)	2	--
Northern Spy-----	1	2	1	(*)	--
Greenings-----	1	1	1	(*)	(*)
Baldwin-----	1	3	(*)	--	--
Pippin-----	1	(*)	--	(*)	5
Washington State-----	1	1	(*)	1	2
All other varieties-----	3	2	5	2	4
No preference-----	8	4	8	11	6
Number of cases-----	2,289	590	669	714	316

¹ Percentages add to more than 100 because some homemakers selected more than one variety.

*Less than 1 percent.

Table 40.--Homemakers who had used fresh apples in the past 12 months: The qualities looked for and varieties chosen in fresh apples¹

Qualities	Delicious		McIntosh		Jonathan		Winesap or Stayman Winesap	
	Eating raw	Cooking	Eating raw	Cooking	Eating raw	Cooking	Eating raw	Cooking
	<u>Percent</u>		<u>Percent</u>		<u>Percent</u>		<u>Percent</u>	
Appearance:								
No blemishes-----	73	60	71	57	79	62	69	55
No bruises-----	65	52	60	49	69	64	60	50
Smooth skin-----	34	24	31	16	36	28	34	22
Shiny-----	27	14	27	11	24	10	27	8
Soft skin-----	10	9	8	5	7	6	9	4
Size and shape:								
Medium-----	64	56	67	45	71	60	66	59
Uniform shape-----	15	9	16	13	17	13	13	11
Large-----	15	23	10	21	9	15	11	14
All same size-----	6	4	7	9	6	9	8	9
Small-----	6	4	6	3	8	5	6	4
Color:								
Deep red-----	46	30	39	18	37	21	44	25
Bright red-----	41	29	42	30	49	35	41	26
Yellow-----	25	16	14	4	21	7	18	3
Part red, part green-----	11	20	21	32	16	31	15	25
Green-----	5	11	5	13	7	15	4	17
Firmness:								
Firm, but not hard-----	64	56	67	54	62	62	59	47
Hard-----	23	23	24	22	27	18	31	33
Soft-----	9	7	6	7	7	3	6	4
Taste:								
Sweet-----	57	36	46	26	44	22	40	16
Tart-----	18	29	18	33	36	49	39	52
Juiciness:								
Juicy-----	90	73	85	73	90	72	86	69
Dry-----	1	3	1	5	1	3	2	4
Number of cases-----	1,317	182	531	334	393	327	357	404

¹ Percentages add to more than 100 because some respondents selected more than one quality.

Table 41.--Homemakers who had used fresh apples in the past 12 months: "During the past year have you used fresh apples for cooking or baking?"

Background characteristics	Have used fresh apples for cooking or baking in past year	Have not used fresh apples for cooking or baking in past year	Cases
	<u>Percent</u>	<u>Percent</u>	<u>Number</u>
United States total-----	84	16	2,307
Region:			
Northeast-----	85	15	596
North Central-----	89	11	675
South-----	80	20	715
West-----	78	22	321
Size of community:			
Large metropolitan areas----	80	20	891
Small metropolitan areas----	83	17	640
Nonmetropolitan areas-----	88	12	776
Family income:			
Upper-----	81	19	680
Middle-----	85	15	755
Lower-----	84	16	596
Employment of homemaker:			
Full time-----	79	21	500
Part time-----	83	17	217
Not employed-----	85	15	1,590
Education of homemaker:			
No high school-----	85	15	540
Some high school-----	84	16	498
High school graduate-----	84	16	818
College-----	81	19	444
Age of homemaker:			
Under 36 years-----	78	22	765
36 - 50 years-----	85	15	797
Over 50 years-----	88	12	730
Family composition:			
No children-----	83	17	918
Children under 6 only-----	78	22	310
Children 6-17 only-----	87	13	672
Children in both age groups--	84	16	407
Size of household:			
Small-----	81	19	753
Medium-----	85	15	869
Large-----	85	15	685
Apple purchase levels:			
High-----	89	11	728
Medium-----	85	15	975
Low-----	76	24	564

Table 42.--Homemakers who used fresh apples for cooking and baking in the past 12 months: "Now will you look at this card and tell me which of these qualities do you look for when choosing fresh apples for cooking or baking?"¹

Qualities	United States total	North-east	North Central	South	West
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
Appearance:					
No blemishes-----	55	50	61	52	60
No bruises-----	49	39	57	44	59
Smooth skin-----	19	14	21	21	22
Shiny-----	8	8	8	9	11
Soft skin-----	5	4	6	6	4
Size and Shape:					
Medium-----	51	44	53	57	46
Large-----	19	26	17	15	20
Uniform shape-----	11	7	11	10	17
All same size-----	8	6	10	6	9
Small-----	4	3	3	7	4
Color:					
Part red, part green---	25	26	30	22	17
Green-----	23	22	19	14	57
Bright red-----	23	20	27	24	17
Deep red-----	19	18	16	27	13
Yellow-----	6	3	9	6	6
Firmness:					
Firm but not hard-----	47	46	51	41	53
Hard-----	27	30	20	33	26
Soft-----	5	6	6	5	2
Taste:					
Tart-----	43	32	49	45	50
Sweet-----	20	20	24	17	18
Juiciness:					
Juicy-----	68	67	73	62	70
Dry-----	5	5	5	6	2
Variety or kind of apple-	25	20	28	21	32
Number of cases-----	1,930	508	598	574	250

¹ Percentages add to more than 100 because some homemakers selected more than one quality.

Table 43.--Homemakers who had used fresh apples for cooking or baking in the past 12 months: "Which variety or kind of apples do you prefer for cooking or baking?"¹

Varieties preferred	United States total	Northeast	North Central	South	West
	Percent	Percent	Percent	Percent	Percent
Winesap, Stayman Winesap-----	21	10	15	41	12
McIntosh-----	17	39	16	3	8
Jonathan-----	17	2	35	11	19
Delicious-----	9	7	7	13	13
Rome Beauty-----	6	3	7	4	18
Cortland-----	4	14	(*)	(*)	--
Greenings-----	4	10	4	1	1
Pippin-----	4	--	(*)	(*)	30
Baldwin-----	3	8	1	1	(*)
Northern Spy-----	3	6	5	--	1
Grimes Golden-----	2	1	3	1	--
York Imperial-----	2	1	--	5	(*)
Gravenstein-----	1	(*)	--	--	8
Wealthy-----	1	(*)	1	--	--
Transparent-----	1	--	3	--	1
All other varieties-----	4	4	4	4	4
No preference-----	14	12	17	16	9
Number of cases-----	1,930	508	598	574	250

¹ Percentages may add to more than 100 because some respondents named more than one variety.

* Less than 1 percent.

Table 44.--Homemakers who had purchased fresh apples in the past 12 months but had not used them for cooking or baking: "How come you haven't used fresh apples for cooking or baking?"¹

Reasons	United States total
	Percent
Prefer raw apples-----	23
No time to bake-----	21
Not worth the effort-----	16
Don't bake-----	12
Buy canned applesauce-----	10
Use canned cooking apples-----	10
Little or no cooking experience-----	10
Health reasons-----	8
Buy store bought desserts-----	6
Don't especially like desserts-----	6
Buy frozen apple pies-----	6
Too expensive to buy apples-----	4
All other reasons-----	3
Not specified-----	1
Number of cases-----	377

¹ Percentages add to more than 100 because some respondents gave more than one reason.

Table 45.--Homemakers who had used fresh apples for cooking or baking in the past 12 months: "During the past year, in which of these ways have you used fresh apples for cooking or baking? Homemade applesauce, baked apples, apple cake..."¹

Background characteristics	Apple pie	Baked apples	Homemade applesauce	Apple cake	Other desserts	Fried apples	All other ways	Cases
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Number
United States total-----	84	66	64	30	38	6	3	1,930
Region:								
Northeast-----	79	65	78	37	36	2	2	508
North Central-----	89	62	73	34	44	7	5	598
South-----	85	69	44	22	35	10	3	574
West-----	76	70	60	28	31	2	4	250
Size of community:								
Large metropolitan areas-----	76	66	66	27	28	5	3	717
Small metropolitan areas-----	87	67	66	31	43	6	4	531
Nonmetropolitan areas-----	89	64	61	32	44	6	3	682
Age of homemaker:								
Under 36 years-----	84	54	52	27	37	6	3	594
36 - 50 years-----	87	68	66	33	41	5	3	677
Over 50 years-----	80	75	74	30	35	7	4	646
Family composition:								
No children-----	79	72	71	27	33	6	4	761
Children under 6 only-----	84	50	51	28	40	7	5	243
Children 6-17 only-----	86	68	64	36	40	6	2	583
Children in both age groups-----	89	61	59	29	42	5	3	343
Size of household:								
Small-----	77	73	70	26	32	6	4	610
Medium-----	84	64	61	29	39	7	3	735
Large-----	90	61	62	35	42	5	4	585
Apple purchase levels:								
High-----	89	70	73	36	44	6	4	645
Medium-----	81	65	60	29	38	6	3	824
Low-----	80	60	61	25	29	5	4	430

¹ Percentages add to more than 100 because some respondents mentioned more than one way.

Table 46.--Homemakers who had used fresh apples for cooking or baking in the past 12 months: "What percentage of all the fresh apples bought during the past year did you use for cooking or baking?"¹

Background characteristics	75 percent and over	50 to 74 percent	25 to 49 percent	Less than 25 percent	Cases
	Percent	Percent	Percent	Percent	Number
United States total-----	11	28	29	31	1,930
Region:					
Northeast-----	12	31	27	29	508
North Central-----	13	31	27	28	598
South-----	9	25	35	31	574
West-----	9	21	22	47	250
Size of community:					
Large metropolitan areas-----	9	24	27	39	717
Small metropolitan areas-----	11	30	29	30	531
Nonmetropolitan areas-----	14	32	30	24	682
Family income:					
Upper-----	8	23	31	38	554
Middle-----	10	28	32	29	640
Lower-----	14	32	27	26	500
Employment of homemaker:					
Full time-----	9	25	31	35	396
Part time-----	12	31	33	24	181
Not employed-----	12	28	28	31	1,353
Education of homemaker:					
No high school-----	14	33	28	24	459
Some high school-----	11	26	28	34	417
High school graduate-----	10	26	30	34	687
College-----	11	28	29	32	360
Age of homemaker:					
Under 36 years-----	6	21	30	42	594
36 - 50 years-----	7	28	34	31	677
Over 50 years-----	20	35	23	20	646
Family composition:					
No children-----	18	32	24	25	761
Children under 6 only-----	9	21	26	43	243
Children 6-17 only-----	7	26	35	32	583
Children in both age groups-----	4	27	31	37	343
Size of household:					
Small-----	18	32	24	25	610
Medium-----	10	26	31	33	735
Large-----	6	26	31	36	585
Apple purchase levels:					
High-----	11	29	32	27	645
Medium-----	8	28	28	35	824
Low-----	17	27	24	31	430

¹ Percentages may add to less than 100 because answers were not obtained from all homemakers.

Table 47.--Homemakers who had used fresh apples for cooking or baking in the past 12 months: "Do you sometimes buy a certain variety or kind of apple especially for cooking or baking?" If no, "Why not?"¹

Replies	United States total
	<u>Percent</u>
Do buy-----	73
Do not buy-----	27
Like all purpose apples-----	8
Use whatever is on hand-----	6
Like the qualities of eating apples for all purposes-----	4
Not fussy about kind-----	3
Just buy, use what is liked-----	2
Buy cheapest for cooking-----	2
See no difference-----	1
Raise own-----	1
Easier to get one kind-----	1
Not available-----	1
Number of cases-----	1,930

¹ Percentages add to more than the group total because some respondents mentioned more than 1 reason.

Table 48.--Homemakers who had purchased fresh apples in the past 12 months: "Do you have any difficulty in finding good fresh apples for cooking or eating raw?" If yes--"Is that at any particular time of year?" If so--"At what particular time of year does this occur?"¹

Replies	Percent
Do not have difficulties-----	86
Have difficulties-----	14
Do not occur at any particular time of year-----	3
Occur at a particular time of year-----	11
Summer-----	6
Spring-----	4
Winter-----	2
Fall-----	1
Number of cases-----	2,307

¹ Percentages add to more than the group total because some respondents mentioned more than 1 season.

Table 49.--Homemakers who had difficulty in finding good fresh apples for cooking or eating raw: "Is this with any special variety or kind of apple?"¹

Replies	United States total
	<u>Percent</u>
DOES NOT OCCUR WITH ANY SPECIFIC VARIETY-----	54
OCCURS WITH A SPECIFIC VARIETY-----	46
Delicious-----	20
Jonathan-----	7
McIntosh-----	6
Winesap or Stayman Winesap-----	3
Pippin-----	2
Rome Beauty-----	2
Northern Spy-----	2
Greenings-----	2
Grimes Golden-----	1
Washington State-----	1
Baldwin-----	1
All other varieties-----	2
Not ascertained-----	5
Number of cases-----	324

¹ Percentages add to more than the group total because some respondents mentioned more than one variety.

Table 50.--Homemakers who had purchased fresh apples in the past 12 months:
"Have you been disappointed in apples that you have bought during the past year?"

Region	Have been disappointed	Have not been disappointed	Cases
	<u>Percent</u>	<u>Percent</u>	<u>Number</u>
United States total-----	28	72	2,307
Region:			
Northeast-----	25	75	596
North Central-----	31	69	675
South-----	25	75	715
West-----	38	62	321

Table 51.--Homemakers who said they had been disappointed with the apples bought in the past 12 months: "In what ways?"¹

Replies	United States total
	<u>Percent</u>
Interior blemishes and deterioration-----	25
Dry-----	22
Soft, mushy, soggy-----	21
No taste, flat-----	16
Bruised, blemished-----	15
Mealy, powdery, pulpy-----	13
Complete spoilage-----	11
Sour, not sweet-----	11
Too hard-----	10
Dislike the taste-----	7
Dislike the quality-----	7
Spoiled quickly, easily-----	6
Not fresh, crisp-----	4
Skin tough, thick-----	4
Wormy-----	4
Too small-----	3
Misty taste-----	1
All other reasons-----	6
Number of cases-----	655

¹ Percentages add to more than 100 because some respondents gave more than one answer.

Table 52.--Homemakers who said they had been disappointed with apples bought in the past 12 months: "Where did you buy the apples you did not like?"¹

Point of purchase	Homemakers responding
	<u>Percent</u>
Supermarket-----	61
Grocery store-----	21
Roadside stand-----	6
Peddler-----	5
Farmer's market-----	4
Orchard, farm-----	2
All other places-----	3
Not ascertained-----	1
Number of cases-----	655

¹ Percentages add to more than 100 because some respondents named more than one point of purchase.

Table 53.--Homemakers who had bought fresh apples in the past 12 months: "Have you bought something else at anytime in the past year when you would have preferred to buy apples? What did you buy (last time)?"¹

Replies	Homemakers who responded
	<u>Percent</u>
HAVE NOT BOUGHT SUBSTITUTES-----	86
HAVE BOUGHT SUBSTITUTES-----	14
Bananas-----	6
Oranges-----	3
Grapes-----	1
Pears-----	1
Peaches-----	1
Plums or fresh prunes-----	1
Other fresh fruits or berries-----	1
Other substitutes-----	1
Number of cases-----	2,307

¹ Percentages add to more than their group total because some respondents named more than 1 fruit.

Table 54.--Homemakers who had bought substitutes for apples in the past 12 months when they would have preferred to buy apples: "What were the circumstances?"¹

Circumstance	United States total
	<u>Percent</u>
Not available-----	31
Too expensive-----	21
Disliked the appearance-----	19
Bruised, blemished, rotten-----	17
Poor quality-----	16
Out of season-----	14
Soft, mushy, not firm-----	5
Disliked the size-----	5
Disliked the color-----	3
Withered, old looking-----	3
Too dry, dried up-----	2
Other circumstances involving quality-----	3
All other circumstances-----	3
Number of cases-----	330

¹ Percentages add to more than 100 because some respondents gave more than 1 circumstance.

Table 55.--All homemakers: Proportions who had made applesauce and/or purchased processed applesauce

Background characteristics	Used home-made only	Used processed only	Used both kinds	Used neither kind	Cases
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Number</u>
United States total-----	14	35	36	15	2,454
Region:					
Northeast-----	14	31	48	7	637
North Central-----	18	28	44	10	716
South-----	11	40	23	26	742
West-----	12	43	29	16	359
Size of community:					
Large metropolitan areas--	11	40	39	10	945
Small metropolitan areas--	11	35	41	13	676
Nonmetropolitan areas----	19	28	31	22	833
Family income:					
Upper-----	11	42	41	6	700
Middle-----	13	35	39	13	807
Lower-----	17	28	29	26	654
Education of homemaker:					
No high school-----	18	26	31	25	603
Some high school-----	12	38	33	17	519
High school graduate-----	13	38	39	10	860
College-----	14	36	42	8	464
Age of homemaker:					
Under 36 years-----	8	49	31	12	791
36 - 50 years-----	13	33	40	14	834
Over 50 years-----	21	23	38	18	812
Family composition:					
No children-----	19	28	34	19	1,025
Children under 6 only----	9	51	30	10	318
Children 6-17 only-----	13	33	42	12	691
Children in both age groups-----	9	42	39	10	420
Size of household:					
Small-----	18	29	32	21	851
Medium-----	12	38	38	12	898
Large-----	11	38	40	11	705

Table 56.--Homemakers who had purchased processed applesauce in the past 12 months: "How do you generally use the applesauce you buy?"¹

Uses	United States total
	<u>Percent</u>
As a side dish with meat-----	62
As a dessert-----	42
In recipes for cake, cookies, etc-----	12
As garnish on meat-----	8
As a breakfast fruit-----	5
With pancakes-----	5
On toast, bread-----	4
As a snack-----	3
As baby food-----	2
All other uses-----	1
Number of cases-----	1,747

¹ Percentages add to more than 100 because some respondents mentioned more than one use.

Table 57.--Homemakers who had purchased processed applesauce in the past 12 months: "Which do you prefer, homemade applesauce or the kind you can buy in the store?"

Background characteristics	Prefer homemade applesauce	Prefer processed applesauce	Have no preference	Cases
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Number</u>
United States total-----	45	36	19	1,747
Region:				
Northeast-----	55	29	16	503
North Central-----	52	31	17	514
South-----	32	46	22	471
West-----	39	39	22	259
Age of homemaker:				
Under 36 years-----	42	40	18	636
36 - 50 years-----	45	37	18	610
Over 50 years-----	50	29	21	490

Table 58.--Homemakers who had purchased processed applesauce in the past 12 months and preferred the processed; preferred the homemade: "Why is that?"¹

Reasons for preference	Preferred processed applesauce	Preferred homemade applesauce
	Percent	Percent
More convenient-----	63	--
Less expensive-----	12	4
Better taste-----	11	20
Better made-----	11	--
Smoother-----	9	2
Other taste factors-----	5	11
Sweet-----	3	8
Tart-----	3	5
Can flavor to own taste-----	2	30
Just like it better-----	2	3
Never tasted homemade-----	2	--
Fresh taste-----	1	20
Color-----	1	3
Other consistency and texture reasons-----	1	2
Tangy-----	1	12
Can select own apples-----	--	6
Crinklier-----	--	3
Nutritious, healthier-----	--	1
Thinner-----	--	1
Thicker-----	--	5
All other reasons-----	4	3
Not ascertained-----	1	1
Number of cases-----	24	795

¹ Percentages add to more than 100 because some respondents gave more than one reason for preference.

Table 59.--All homemakers: "How would you describe the way good applesauce should look and taste?"¹

Characteristics	United States total	Northeast	North Central	South	West
	Percent	Percent	Percent	Percent	Percent
Taste:					
Sweet-----	27	27	34	26	19
Not too sweet, not too tart-----	23	28	23	22	20
Tart-----	13	13	14	12	14
With a little cinnamon-----	10	15	13	4	9
With other specific spices-----	9	11	8	10	9
Fresh taste-----	9	7	9	11	7
Tangy-----	4	3	4	3	4
No seasoning-----	3	3	3	3	4
Other characteristics-----	3	3	3	4	5
Consistency:					
Medium thick-----	25	27	23	23	29
Smooth-----	25	31	25	23	23
Thick, heavy-----	12	8	13	14	15
Chunky-----	6	6	9	3	8
Thin-----	2	2	1	2	1
Consistency is not important-----	(*)	--	(*)	--	(*)
Other characteristics-----	(*)	--	(*)	(*)	1
Color:					
Yellowish-----	20	21	24	17	18
Light-----	18	12	19	23	16
Pink-----	11	20	12	4	6
Clear-----	9	4	12	14	4
Tan, brownish-----	8	11	7	6	7
Bright-----	4	2	3	6	3
Color is not important-----	(*)	(*)	(*)	(*)	1
Other characteristics-----	(*)	(*)	1	(*)	(*)
All others (not taste, color, consistency)-----	(*)	(*)	1	1	(*)
Not ascertained-----	4	1	1	8	3
Number of cases-----	2,454	637	716	742	359

¹ Percentages add to more than 100 because some respondents mentioned more than one characteristic.

* Less than 1 percent.

Table 60.--Homemakers' opinions about the consistency and color good applesauce should have¹

Characteristics	Unaided ²	Aided ²	Total aided and unaided	Northeast	North Central	South	West
	Percent	Percent ³	Percent	Percent	Percent	Percent	Percent
Consistency:							
Medium thick-----	25	25	49	51	48	49	50
Smooth-----	25	9	35	44	34	30	29
Thick, heavy-----	12	12	24	21	26	26	26
Chunky-----	6	3	9	7	14	4	12
Thin-----	2	2	3	4	2	3	5
Consistency is not important---	(*)	2	2	1	1	2	3
Other consistency characteristics-----	(*)	1	1	1	1	1	1
Color:							
Yellowish-----	20	14	35	34	36	30	42
Light-----	18	5	23	14	24	30	22
Pink-----	11	4	15	26	15	7	9
Clear-----	9	2	12	4	14	17	9
Tan, brownish-----	8	4	12	17	10	9	12
Bright-----	4	1	4	3	3	7	4
Color is not important-----	(*)	5	5	6	5	5	8
Other color characteristics-----	(*)	1	1	1	2	1	(*)
Number of cases-----	2,454	2,454	2,454	637	716	742	359

¹ Percentages add to more than 100 because some respondents mentioned more than one characteristic.

² Homemakers were asked, "How would you describe the way good applesauce should look and taste?" (unaided). Those who did not mention color or consistency were then asked, "What about color?" "What about consistency?" (aided) (see table 59).

³ Percentages add to less than 100 because it was not necessary to ask all respondents Q. 29b, c.

* Less than 1 percent

Table 61.--Homemakers who had indicated a preference for processed or homemade applesauce: "How would you describe the way good applesauce should look and taste?"¹

Description	Homemakers who preferred	
	Homemade applesauce	Processed applesauce
Taste:	Percent ²	Percent ²
Sweet-----	27	29
Not too sweet, not too tart-----	22	27
With a little cinnamon-----	17	6
Tart-----	17	12
With other spices-----	16	6
Fresh taste-----	10	10
Tangy-----	5	3
No seasoning-----	2	3
Other characteristics-----	4	3
Consistency:		
Medium thick-----	50	55
Smooth-----	36	38
Thick, heavy-----	26	22
Chunky-----	13	5
Thin-----	3	5
Consistency is not important-----	1	1
Other characteristics-----	1	1
Color:		
Yellowish-----	30	46
Pink-----	24	5
Tan, brownish-----	19	7
Light-----	17	31
Clear-----	9	11
Bright-----	7	3
Color is not important-----	3	4
Other characteristics-----	1	1
Number of cases-----	795	624

¹ See footnote 1 to table 60.

² Percentages add to more than 100 because some respondents mentioned more than one characteristic.

Table 62.--All homemakers: "Which of these canned fruits have you bought within the past 12 months for use in your home?"¹

Background characteristics	Pineapple	Fruit cocktail or salad	Peaches	Pears	Apricots	Sweet cherries	Apple	Plums or prunes	Sour cherries	None	Case; Number
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Number
United States total-----	86	86	83	65	43	36	34	32	28	3	2,454
Region:											
Northeast-----	82	86	82	70	41	34	25	35	17	4	637
North Central-----	89	82	86	68	55	42	32	38	39	2	716
South-----	86	81	80	58	30	38	41	23	27	4	742
West-----	83	88	83	67	52	24	41	30	28	2	359
Size of community:											
Large metropolitan areas-----	82	84	84	66	45	30	32	32	21	3	945
Small metropolitan areas-----	87	88	85	72	46	38	37	34	32	2	676
Nonmetropolitan areas-----	90	85	80	59	39	41	34	28	33	3	833
Family income:											
Upper-----	93	92	88	79	53	43	37	40	32	1	700
Middle-----	87	90	84	65	44	36	36	33	32	1	807
Lower-----	76	76	75	51	33	26	31	23	21	7	654
Education of homemaker:											
No high school-----	78	76	74	50	33	30	29	23	24	7	603
Some high school-----	84	86	82	63	38	31	34	29	22	2	519
High school graduate-----	88	91	86	71	48	37	35	35	30	1	860
College-----	93	88	88	78	55	45	39	39	36	2	464
Age of homemaker:											
Under 36 years-----	85	89	88	70	39	34	36	31	25	2	791
36 - 50 years-----	90	88	84	67	46	39	37	34	31	2	834
Over 50 years-----	83	79	77	60	46	35	29	30	28	3	812
Family composition:											
No children-----	82	79	77	59	43	34	30	28	25	5	1,025
Children under 6 only-----	86	90	89	74	41	33	37	34	23	2	318
Children between 6-17 only-----	89	89	84	67	44	39	37	35	34	1	691
Children in both age groups-----	91	93	90	71	45	36	36	35	29	1	420
Size of household:											
Small-----	80	76	76	58	41	33	29	26	24	6	851
Medium-----	88	90	87	70	47	39	37	35	31	1	898
Large-----	90	91	86	68	41	36	36	35	29	1	705

¹ Percentages add to more than 100 because some respondents mentioned more than one canned fruit.

Table 63.--Homemakers who had purchased the specific fresh fruits in the past or recent years and who had purchased the same fruit canned in the past year

	In the past year		
	Bought same fruit canned	Did not buy same fruit canned	Cases
	Percent	Percent	Number
Fresh fruits purchased in past year and in recent years			
Apples			
Had bought in past year-----	36	64	2,307
Had not bought in past year, but had bought in recent years-----	--	--	1 27
Had not bought in past year or in recent years-----	11	89	80
Apricots			
Had bought in past year-----	62	38	529
Had not bought in past year, but had bought in recent years-----	47	53	427
Had not bought in past year or in recent years-----	36	64	1,395
Peaches			
Had bought in past year-----	86	14	2,104
Had not bought in past year, but had bought in recent years-----	74	26	122
Had not bought in past year or in recent years-----	63	37	175
Pears			
Had bought in past year-----	74	26	1,677
Had not bought in past year, but had bought in recent years-----	59	41	220
Had not bought in past year or in recent years-----	42	58	476
Pineapple			
Had bought in past year-----	89	11	712
Had not bought in past year, but had bought in recent years-----	89	11	410
Had not bought in past year or in recent years-----	85	15	1,196
Plums or prunes			
Had bought in past year-----	38	62	1,613
Had not bought in past year, but had bought in recent years-----	26	74	194
Had not bought in past year or in recent years-----	16	84	553
Sweet cherries			
Had bought in past year-----	42	58	1,168
Had not bought in past year, but had bought in recent years-----	39	61	346
Had not bought in past year or in recent years-----	28	72	833

¹ Number of cases too small for detailed analysis.

Table 64.--All homemakers: "Which of these juices have you bought in the past 12 months?"¹

Background characteristics	Grape juice	Pineapple juice	Prune juice	Apple juice	None	Cases
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Number</u>
United States total-----	63	62	40	38	13	2,454
Region:						
Northeast-----	65	67	46	46	12	637
North Central-----	63	58	39	28	14	716
South-----	62	61	38	32	15	742
West-----	63	65	38	55	9	359
Size of community:						
Large metropolitan areas-----	64	65	44	48	11	945
Small metropolitan areas-----	66	63	39	35	13	676
Nonmetropolitan areas-----	60	59	37	28	16	833
Family income:						
Upper-----	74	71	45	48	7	700
Middle-----	65	64	39	39	10	807
Lower-----	53	54	36	26	21	654
Education of homemaker:						
No high school-----	52	53	36	27	21	603
Some high school-----	61	64	42	36	14	519
High school graduate-----	67	64	40	37	10	860
College-----	72	68	43	54	8	464
Age of homemaker:						
Under 36 years-----	71	61	37	43	10	791
36 - 50 years-----	66	67	42	39	12	834
Over 50 years-----	52	59	41	31	18	812
Family composition:						
No children-----	52	58	41	32	18	1,025
Children under 6 only-----	64	58	41	48	11	318
Children 6-17 only-----	70	68	42	37	10	691
Children in both age groups-----	75	67	35	43	7	420
Size of household:						
Small-----	51	57	39	32	19	851
Medium-----	67	63	42	41	10	898
Large-----	72	68	38	41	9	705

¹ Percentages add to more than 100 because some respondents mentioned more than one juice.

Table 65.--All homemakers: "Have you bought any dried prunes in the past year?"

Background characteristics	Have bought dried prunes in the past year	Have not bought dried prunes in the past year	Cases
	<u>Percent</u>	<u>Percent</u>	<u>Number</u>
United States total-----	59	41	2,454
Age of homemaker:			
Under 36 years-----	47	53	791
36 - 50 years-----	64	36	834
Over 50 years-----	64	36	812

Table 66.--Homemakers who had bought dried prunes in the past year: "How often have you used them in the past year?"

Background characteristics	Less than once a month	Once a month	2 or 3 times a month	Once a week	More than once a week	No answer	Cases
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Number</u>
United States total-----	44	23	18	8	6	1	1,440
Region:							
Northeast-----	49	23	15	6	7	--	343
North Central-----	47	22	17	7	7	--	427
South-----	39	23	21	9	6	2	456
West-----	44	25	17	9	5	--	214
Size of community:							
Large metropolitan areas-----	42	24	18	8	8	--	537
Small metropolitan areas-----	51	22	14	7	5	1	405
Nonmetropolitan areas-----	41	24	21	7	5	2	498
Family income:							
Upper-----	49	24	15	7	5	--	438
Middle-----	48	22	18	6	6	--	453
Lower-----	35	23	23	10	7	2	368
Education of homemaker:							
No high school-----	37	22	21	10	9	1	343
Some high school-----	40	26	18	8	7	1	307
High school graduate-----	52	21	16	6	4	1	507
College-----	47	23	17	7	5	1	278
Age of homemaker:							
Under 36 years-----	55	21	14	5	5	--	373
36 - 50 years-----	46	26	16	6	5	1	533
Over 50 years-----	36	21	22	11	9	1	522
Family composition:							
No children-----	38	24	20	9	8	1	618
Children under 6 only-----	53	21	16	6	3	1	144
Children 6-17 only-----	46	22	18	7	6	1	436
Children in both age groups--	53	24	15	5	3	--	242
Size of household:							
Small-----	41	21	19	9	9	1	492
Medium-----	44	23	18	8	6	1	528
Large-----	49	25	16	6	4	--	420

Table 67.--All homemakers: Incidence of purchasing dried prunes, canned plums or prunes, and prune juice in the past year

Type of prune product purchased	United States total
	<u>Percent</u>
Dried prunes only-----	21
Canned prunes only-----	5
Prune juice only-----	7
Dried and canned prunes-----	9
Dried prunes and prune juice-----	15
Canned prunes and prune juice-----	5
Dried, canned, and prune juice-----	13
Do not buy-----	25
Number of cases-----	2,454

Table 68.--Homemakers who had bought dried prunes in the past 12 months: "What are your main reasons for buying dried prunes?"¹

Reasons	United States total
	<u>Percent</u>
They act as a laxative-----	44
To make stewed prunes-----	19
To use as a breakfast fruit-----	16
Good for health-----	13
To use for recipes-----	12
To eat dry or raw-----	12
Like taste-----	10
For variety-----	10
To use for snacks-----	9
For desserts-----	7
They are nutritious-----	5
Like them (general)-----	4
They are sweet-----	4
Good for children's health-----	3
To eat as a substitute for sweets--	3
They don't spoil-----	3
Easy to prepare-----	2
Price reasons-----	2
Habit-----	2
For juice-----	2
Other taste reasons-----	2
Availability-----	1
Not ascertained-----	1
Number of cases-----	1,440

¹ Percentages add to more than 100 because some respondents mentioned more than one reason.

Table 69.--Homemakers who had bought dried prunes in the past 12 months: "What, if anything, don't you like so well about them?"¹

Replies	United States total
	<u>Percent</u>
HAVE NO DISLIKES-----	88
HAVE SOME DISLIKES-----	12
They are expensive-----	3
Dislike pits-----	3
Dislike preparing them-----	2
Dislike the taste-----	2
Dislike the texture-----	1
Dislike for health reasons-----	1
All other dislikes-----	2
Number of cases-----	1,440

¹ Percentages add to more than their group total because some respondents gave more than 1 dislike.

Table 70.--Homemakers' main reasons for buying dried prunes, by frequency of use¹

Frequency of use	Act as a laxative	To make stewed prunes	To use as a breakfast fruit	Good for health	To use for recipes	To eat dry or raw	Like the taste	For variety	Cases
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Number</u>
United States total	44	19	16	13	12	12	10	10	1,440
Less often than once a month.	41	19	12	11	13	11	9	13	642
Once a month	39	19	17	12	10	14	10	10	332
Two or 3 times a month	50	17	19	14	13	12	10	8	257
Once a week	48	21	20	19	12	10	14	6	110
More than once a week	58	18	23	25	11	11	9	-	88

¹ Percentages add to more than 100 because some respondents mentioned more than one reason.

Table 71.--Homemakers who had not purchased dried prunes in the past 12 months:
 "How come you don't buy dried prunes?"¹

Reasons	United States total
	<u>Percent</u>
Don't care for them	22
Dislike taste	21
Prefer other forms of prunes	13
Just don't bother to buy them	12
Dislike preparing them	11
Not good for health	9
Prefer other fruits	7
Expensive	7
Dislike the texture	5
Receive them as a gift	3
Don't know what they are	2
Dislike appearance	2
Unavailable	1
Dislike pits	1
All other reasons	1
Not ascertained	1
Number of cases	1,014

¹ Percentages add to more than 100 because some respondents mentioned more than one reason.

Table 72.--All homemakers: "Have you used raisins in your home in the last year?" If yes: "About how often have you used raisins in the past year?"

Background characteristics	Homemakers who had--		Frequency of serving among users						
	Used raisins in the past year	Not used raisins in the past year	Cases	More than once a week	Once a week	2 or 3 times a month	Once a month	Less than once a month	Cases
	<u>Percent</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Number</u>
United States total-----	83	17	2,454	8	12	20	23	37	2,040
Region:									
Northeast-----	79	21	637	9	11	22	21	37	505
North Central-----	85	15	716	7	12	20	24	37	607
South-----	83	17	742	5	10	19	23	43	618
West-----	86	14	359	15	17	19	22	27	310
Family composition:									
No children-----	75	25	1,025	6	11	20	22	41	765
Children under 6 only---	83	17	318	9	12	20	20	39	264
Children 6-17 only-----	89	11	691	9	12	20	22	37	618
Children in both age groups-----	94	6	420	10	15	20	26	29	393

Table 73.--1957 STUDY¹ "Have you used or served raisins in your home in the last year?" (If yes): "About how often have you used or served raisins in the past year?"

Background characteristics	Use in past year			Frequency of serving				
	Used	Did not use	Cases	More than once a week	Once a week	1 - 3 times a month	Less than once a month	Cases
	<u>Percent</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Number</u>
United States total.....	83	17	2,572	18	19	34	29	2,125
Region:								
Northeast.....	79	21	660	19	19	32	30	523
North Central.....	85	15	743	15	19	37	29	633
South.....	84	16	753	17	18	33	32	632
West.....	81	19	416	24	24	32	20	337
Family composition:								
No children.....	76	24	1,187	13	18	33	36	904
Children 12-17 only.....	89	11	249	19	20	40	21	222
Children under 12 only.....	87	13	784	23	21	33	23	680
Children in both age groups.....	91	9	351	22	19	35	24	318

¹ This table comes from a survey conducted early in 1957 (Homemakers Appraise Citrus Products, Avocados, Dates and Raisins -- United States Department of Agriculture, Marketing Research Report No. 243). In comparing this table with table 72, it should be noted that the frequency categories are slightly different, and so are the age groups of children.

QUESTIONNAIRE

With the exception of check-box material, some instructions to interviewers, office record information, and free-answer space, the questionnaire used for this study is reproduced below in entirety. Instructions to interviewers are in upper case letters enclosed in parentheses.

Good morning/afternoon/evening. I am _____ of Crossley, S-D Surveys, an independent marketing research firm. We are conducting a survey for the U.S. Department of Agriculture talking to homemakers about the fresh fruits that they buy.

- 1a. (SHOW RESPONDENT'S CARD A) Which of these fresh fruits have you or your family bought in the past 12 months? b. (FOR EACH FRESH FRUIT NOT BOUGHT) Why haven't you bought fresh (FRUIT) in the past year? c. (FOR EACH FRESH FRUIT NOT BOUGHT) Have you bought fresh (FRUIT) in recent years?

RESPONDENT'S CARD A

Apples	Grapes	Pears
Apricots	Nectarines	Pineapples
Bananas	Oranges	Plums or fresh
Cherries	Peaches	prunes

- d. (IF NONE OF THESE FRESH FRUITS HAVE BEEN BOUGHT IN THE PAST YEAR) Why is that?

(FOR HOMEMAKERS WHO HAD BOUGHT NONE OF THESE
FRESH FRUITS, SKIP TO QUESTION 24a)

- 2a. (FOR EACH OF THESE FRESH FRUITS--APPLES, BANANAS, GRAPES, PEACHES) Would you say the amount of (FRUIT) you have bought in the past 12 months is more, less, or about the same as the amount bought, say, 5 years ago? b. (IF "MORE" OR "LESS") Why are you buying more/less (FRUIT) now?

- 3a. (FOR EACH OF THESE FRESH FRUITS--APPLES, BANANAS, GRAPES, PEACHES, PEARS, PLUMS OR FRESH PRUNES) During which season of the year do you buy the greatest amount of fresh (FRUIT)? b. What amount of fresh (FRUIT) do you usually buy at a time during (THAT SEASON)? c. About how often do you buy (FRUIT) in this quantity during (THAT SEASON)? d. In what other seasons do you buy fresh (FRUIT)?

4. Suppose you were the manager of a store and wanted to get people to buy more of these fresh fruits. What ways can you think of that might get your customers to buy more?

- 5a. What kind of fresh fruit did you buy last? b. (FOR EACH KIND OF FRESH FRUIT BOUGHT) Did you buy (FRUIT) loose or already in some kind of bag or container? c. (FOR EACH KIND OF FRESH FRUIT BOUGHT) Which one of these statements comes closest to describing how you decided to buy (FRUIT)--

Planned to buy this fruit before entering the store?

Planned to buy some kind of fruit, but decided on
this kind in the store?

Didn't plan to buy fruit ahead of time, decided to
buy this kind in the store?

- 6a. In general, would you like to buy fresh fruit that is already in some kind of bag or container, or would you rather buy it loose? b. (WHETHER PACKAGED OR LOOSE FRUIT IS PREFERRED) Are there any fresh fruits you don't like to buy this way? c. (IF THERE ARE FRESH FRUITS NOT LIKED IN THE WAY GENERALLY PREFERRED) Which ones?

- 7a. What are the advantages of buying fresh fruit loose? b. What are the advantages of buying fresh fruit in some kind of bag or container?

8. (SHOW RESPONDENT'S CARD B AND ASK FOR EACH OF THESE FRESH FRUITS--APPLES, BANANAS, GRAPES, PEACHES, PEARS, PLUMS OR FRESH PRUNES) Here's a list of statements which some people have made about fresh fruits. Which of these statements do you feel are especially true about (FRUIT)?

9. (SHOW RESPONDENT'S CARD B) How would you rate the importance of each of these factors when you are considering which fresh fruits to purchase? For example would you say "Can be used many ways" is very important, fairly important, or not too important to you?

RESPONDENT'S CARD B

Can be used many ways
 Difficult to tell when ripe
 Family does not like them
 Reasonably priced when in season
 Often bruised, blemished
 Hard to digest
 Good laxative
 Low in calories
 Spoils easily

Messy to eat
 Can buy ready to use without further ripening
 Good for health
 Hard to find variety liked even in season
 Hard to find good quality even in season
 Good for snacks/packed lunches

(IF HOMEMAKER HAS PURCHASED FRESH APPLES IN THE PAST 12 MONTHS--SEE QUESTION 1a--ASK THE FOLLOWING QUESTIONS. IF NOT, SKIP TO QUESTION 23)

Fresh Apple Section

Now we would like to know a little more about your use of fresh apples.

10a. Where do you buy fresh apples most often to use at home? b. Where else do you buy them occasionally?

11a. During the fall and winter do you use fresh apples at least once a week or do you use them less often? b. What about the spring? c. What about the summer? d. (FOR EACH SEASON IN WHICH APPLES ARE USED LESS OFTEN THAN ONCE A WEEK) Why don't you use them more often during (SEASON)?

12a. During the past year, in which of these ways have you used raw apples in your home? Eaten out-of-hand? Salads? Fruit cups? b. (IF RAW APPLES NOT USED) How come you haven't used any raw apples?

13a. (IF RAW APPLES USED) When are apples eaten raw most often by your family? Meals at home? Packed lunches? Daytime snacks? Evening snacks? b. When else are they eaten in this way? Meals at home? Packed lunches? Daytime snacks? Evening snacks?

14a. (SHOW RESPONDENT'S CARD C) Which of these qualities do you look for when choosing fresh apples for eating raw? b. Which variety or kind of apples do you prefer for eating raw?

RESPONDENT'S CARD C

Shiny
 Soft skin
 No blemishes or spots
 Smooth skin
 No bruises

Deep red
 Bright red
 Part red, part green
 Green
 Yellow

Uniform shape
 Small size
 Medium size
 Large size
 All same size

Hard
 Soft
 Firm, but not hard
 Sweet
 Tart

Dry
 Juicy
 Variety or kind of apple

15. During the past year have you used fresh apples for cooking or baking?

16a. (SHOW RESPONDENT'S CARD C IF FRESH APPLES USED FOR COOKING OR BAKING DURING THE PAST YEAR) Which of these qualities do you look for when choosing fresh apples for cooking or baking? b. Which variety or kind of apples do you prefer for cooking or baking?

RESPONDENT'S CARD C

SAME AS CARD SHOWN IN QUESTION 14a

17. (IF FRESH APPLES NOT USED FOR COOKING OR BAKING--SEE QUESTION 15) How come you haven't used fresh apples for cooking or baking?

(IF HOMEMAKER HAS USED FRESH APPLES FOR COOKING OR BAKING IN THE PAST YEAR--SEE QUESTION 15--ASK THE FOLLOWING QUESTIONS. IF NOT, SKIP TO QUESTION 20a)

18a. During the past year, in which of these ways have you used fresh apples for cooking or baking? Homemade applesauce? Baked apples? Apple cake? Apple pie? Other dessert? Some other way? b. What percentage of all the fresh apples bought during the past year did you use for cooking or baking?

19a. Do you sometimes buy a certain variety or kind of apple especially for cooking or baking? b. (IF HOMEMAKER DOES NOT BUY A CERTAIN VARIETY FOR BAKING OR COOKING) Why not?

(ASK EVERYONE WHO HAS BOUGHT FRESH APPLES IN THE PAST YEAR)

20a. Do you have any difficulty in finding good fresh apples for cooking or eating raw? b. (IF HOMEMAKER HAD DIFFICULTY) Is that at any particular time of year? c. (IF HOMEMAKER HAD DIFFICULTY AT ANY PARTICULAR TIME OF YEAR) At what particular time of year does this occur? d. (IF HOMEMAKER HAD DIFFICULTY) Is this with any special variety or kind of apple? e. (IF HOMEMAKER HAD DIFFICULTY WITH ANY SPECIAL VARIETY OR KIND OF APPLE) With what particular variety or kind of apples does this occur?

21a. Have you been disappointed in apples that you have bought during the past year? b. (IF DISAPPOINTED) In what ways? c. (IF DISAPPOINTED) Where did you buy the apples you did not like?

22a. Have you bought something else at any time in the past year when you would have preferred to buy apples? b. (IF SOMETHING ELSE BOUGHT) What did you buy (LAST TIME)? c. (IF SOMETHING ELSE BOUGHT) What were the circumstances?

23. (IF AT LEAST ONE FRESH FRUIT HAS BEEN BOUGHT IN THE PAST YEAR--SEE QUESTION 1a) Is there anything you don't like so well about using fresh apples? Apricots? Cherries? Grapes? Nectarines? Peaches? Pears? Pineapple? Plums or fresh prunes?

Processed Fruits and Juices Section

24a. Which of these canned fruits have you bought within the past 12 months for use in your home? Apples? Apricots? Peaches? Pears? Sweet cherries? Sour cherries? Plums or prunes? Fruit cocktail or salad? Pineapple? b. Which of these juices have you bought in the past 12 months? Apple? Grape? Pineapple? Prune?

25a. Have you bought any dried prunes in the past 12 months? b. (IF DRIED PRUNES NOT BOUGHT) How come you don't buy dried prunes? c. (IF DRIED PRUNES BOUGHT) What are your main reasons for buying dried prunes? d. (IF DRIED PRUNES BOUGHT) What, if anything, don't you like so well about them? e. (IF DRIED PRUNES BOUGHT) How often have you used them in the past year?

26a. Have you used raisins in your home in the last year? b. (IF RAISINS USED) About how often have you used raisins in the last year?

27a. Have you bought any applesauce in cans or jars in the past 12 months? b. (IF APPLESAUCE BOUGHT) How do you generally use the applesauce you buy?

28a. (IF APPLESAUCE BOUGHT) Which do you prefer, homemade applesauce or the kind you can buy in the store? b. (IF EITHER TYPE IS PREFERRED) Why is that?

29a. How would you describe the way good applesauce should look and taste? b. (IF "COLOR" NOT MENTIONED) What about color? c. (IF "CONSISTENCY" NOT MENTIONED) What about consistency?

CLASSIFICATION DATA

30a. How many members including yourself, are there living in this household? b. How many of them are:
adult males, 19 & over?
adult females, 19 & over?
young people, 13-18
children, 6-12?
children under 6?

31. What was the last grade you completed at school?

32. Are you married or single?

33. What was your age on your last birthday?

34a. What is the occupation of the head of the household? b. In what type of business or industry does he/she work?

35a. What is your occupation? b. (IF EMPLOYED) In what type of business or industry do you work?
c. (IF EMPLOYED) Are you employed part time/full time?

36. (SHOW INCOME CARD) Into which of these groupings does your combined family income from all sources of all those in your immediate household fall? (Please include income from salaries, investments, dividends, net income from farming or self-employment, rent, royalties, capital gains from sales, bonuses, commissions, etc.)

RESPONDENT'S CARD D

Under \$2,000
\$2,000 to \$2,999
\$3,000 to \$3,999
\$4,000 to \$4,999

\$5,000 to \$5,999
\$6,000 to \$6,999
\$7,000 to \$7,999
\$8,000 to \$8,999

\$9,000 to \$10,999
\$11,000 to \$14,999
\$15,000 or over

37. Sex of respondent.

